

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No. 1004-0136  
Expires January 31, 2004

5. Lease Serial No.

UTU-017985

6. If Indian, Allottee or Tribe Name

N/A

7. If Unit or CA Agreement, Name and No.

Jonah Unit

8. Lease Name and Well No.

Jonah Federal B-15-9-16

9. API Well No.

43-013-34016

10. Field and Pool, or Exploratory

Monument Butte

11. Sec., T., R., M., or Blk. and Survey or Area

10  
Sec. 10, T9S R16E

12. County or Parish

Duchesne

13. State

UT

1a. Type of Work: ☒ DRILL

☐ REENTER

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other

☒ Single Zone ☐ Multiple Zone

2. Name of Operator

Newfield Production Company

3a. Address

Route #3 Box 3630, Myton UT 84052

3b. Phone No. (include area code)

(435) 646-3721

4. Location of Well (Report location clearly and in accordance with any State requirements. \*)

At surface SE/SE 639' FSL 673' FEL Sec. 10, T9S R16E

At proposed prod. zone 45' FNL 1310' FEL Sec. 15, T9S R16E ~~WENE~~

14. Distance in miles and direction from nearest town or post office\*

Approximately 16.3 miles southwest of Myton, Utah

15. Distance from proposed\*  
location to nearest  
property or lease line, ft.  
(Also to nearest drig. unit line, if any)

Approx. 1310' f/ise, 1365' f/unit

16. No. of Acres in lease

560.00

17. Spacing Unit dedicated to this well

20 Acres

18. Distance from proposed location\*  
to nearest well, drilling, completed,  
applied for, on this lease, ft.

Approx. 1245'

19. Proposed Depth

6100'

20. BLM/BIA Bond No. on file

WYB000493

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

5698' GL

22. Approximate date work will start\*

4th Quarter 2008

23. Estimated duration

Approximately seven (7) days from spud to rig release.

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

1. Well plat certified by a registered surveyor.

2. A Drilling Plan.

3. A Surface Use Plan (if the location is on National Forest System Lands, the  
SUPO shall be filed with the appropriate Forest Service Office).

4. Bond to cover the operations unless covered by an existing bond on file (see  
Item 20 above).

5. Operator certification.

6. Such other site specific information and/or plans as may be required by the  
authorized officer.

25. Signature

Name (Printed/Typed)

Mandie Crozier

Date

6/25/08

Title

Regulatory Specialist

Approved by (Signature)

Name (Printed/Typed)

BRADLEY G. HILL

Date

07-07-08

Title

Office ENVIRONMENTAL MANAGER

Application approval does not warrant or certify the the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct  
operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United  
States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

Surf

576973X

4432354Y

40.639799

110.097757

BUL

576782X

4432145Y

40.037926

110.100019

Federal Approval of this  
Action Is Necessary

RECEIVED

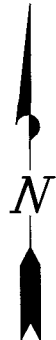
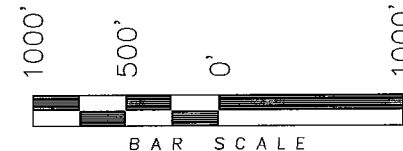
JUN 27 2008

DIV. OF OIL, GAS & MINING

**T9S, R16E, S.L.B.&M.**

**NEWFIELD PRODUCTION COMPANY**

WELL LOCATION, JONAH UNIT B-15-9-16,  
LOCATED AS SHOWN IN THE SE 1/4 SE  
1/4 OF SECTION 10, T9S, R16E, S.L.B.&M.  
DUCHESNE COUNTY, UTAH.



**Note:**

1. The bottom of hole footages  
are 45' FNL & 1310' FEL.

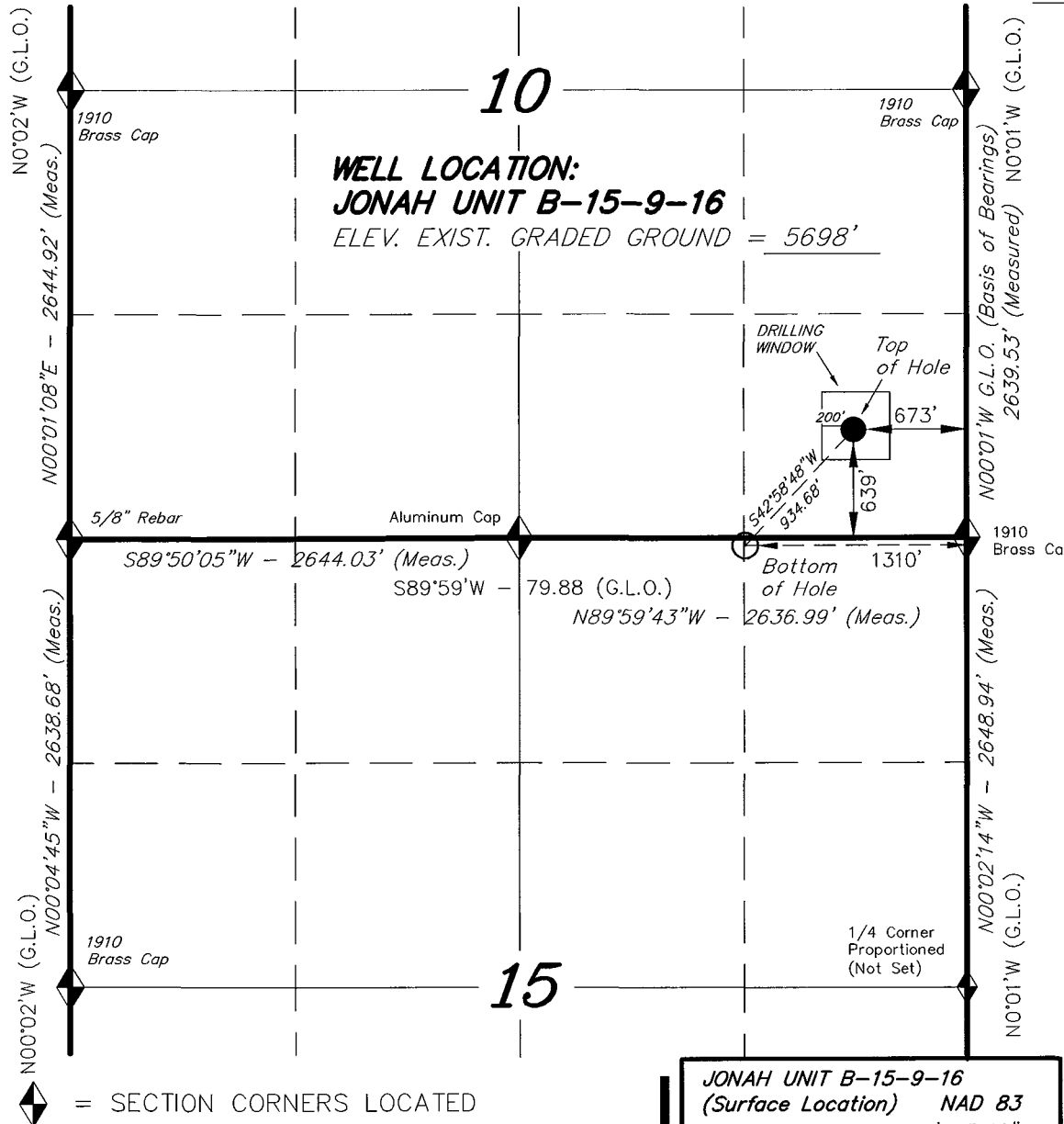
THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS  
PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS  
MADE BY ME OR UNDER MY SUPERVISION AND THAT  
THE SAME ARE TRUE AND CORRECT TO THE BEST OF  
MY KNOWLEDGE AND BELIEF. No. 189377

*Stacy W. Stewart*  
STACY W. STEWART  
REGISTERED LAND SURVEYOR  
REGISTRATION No. 189377  
STATE OF UTAH

**TRI STATE LAND SURVEYING & CONSULTING**

180 NORTH VERNAL AVE. - VERNAL, UTAH 84078  
(435) 781-2501

DATE SURVEYED: 04-26-08	SURVEYED BY: T.H.
DATE DRAWN: 04-30-08	DRAWN BY: F.T.M.
REVISED:	SCALE: 1" = 1000'



◆ = SECTION CORNERS LOCATED

BASIS OF ELEV;  
U.S.G.S. 7-1/2 min QUAD (MYTON SE)

**JONAH UNIT B-15-9-16**  
**(Surface Location) NAD 83**  
LATITUDE = 40° 02' 23.46"  
LONGITUDE = 110° 05' 54.24"

**NEWFIELD PRODUCTION COMPANY  
JONAH FEDERAL B-15-9-16  
AT SURFACE: SE/SE SECTION 10, T9S, R16E  
DUCHESNE COUNTY, UTAH**

**ONSHORE ORDER NO. 1**

**DRILLING PROGRAM**

**1. GEOLOGIC SURFACE FORMATION:**

Uinta formation of Upper Eocene Age

**2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:**

Uinta	0' – 1510'
Green River	1510'
Wasatch	6100'

**3. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:**

Green River Formation 1510' – 6100' - Oil

**4. PROPOSED CASING PROGRAM**

Please refer to the Monument Butte Field Standard Operation Procedure (SOP).

**5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:**

Please refer to the Monument Butte Field SOP. See Exhibit "C".

**6. TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:**

Please refer to the Monument Butte Field SOP.

**7. AUXILIARY SAFETY EQUIPMENT TO BE USED:**

Please refer to the Monument Butte Field SOP.

**8. TESTING, LOGGING AND CORING PROGRAMS:**

Please refer to the Monument Butte Field SOP.

**9. ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:**

The anticipated maximum bottom hole pressure is 1800 psi. It is not anticipated that abnormal temperatures will be encountered.

**10. ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:**

Please refer to the Monument Butte Field SOP.

**NEWFIELD PRODUCTION COMPANY  
JONAH FEDERAL B-15-9-16  
AT SURFACE: SE/SE SECTION 10, T9S, R16E  
DUCHESNE COUNTY, UTAH**

**ONSHORE ORDER NO. 1**

**MULTI-POINT SURFACE USE & OPERATIONS PLAN**

**1. EXISTING ROADS**

See attached Topographic Map "A"

To reach Newfield Production Company well location site Jonah Federal B-15-9-16 located in the SE 1/4 SE 1/4 Section 10, T9S, R16E, Duchesne County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 - 1.4 miles  $\pm$  to the junction of this highway and UT State Hwy 53; proceed southeasterly - 10.0 miles  $\pm$  to it's junction with an existing dirt road to the southwest; proceed southwesterly - 4.7 miles  $\pm$  to it's junction with an existing road to the east; proceed northeasterly - 0.2 miles  $\pm$  to it's junction with the beginning of the access road to the existing Castle Peak Fed. 44-10-9-16 well lcoation.

**2. PLANNED ACCESS ROAD**

There is no proposed access road for this location. The proposed well will be drilled directionally off of the existing Castle Peak Fed. 44-10-9-16 well pad. See attached **Topographic Map "B"**.

**3. LOCATION OF EXISTING WELLS**

Refer to Exhibit "B".

**4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES**

The proposed well will be drilled directionally off of the Castle Peak Fed. 44-10-9-16 well pad. There will be a pumping unit and a short flow line added to the tank battery for the proposed Jonah Federal B-15-9-16. All permanent surface equipment will be painted Carlsbad Canyon.

Please refer to the Monument Butte Field Standard Operating Procedure (SOP).

**5. LOCATION AND TYPE OF WATER SUPPLY**

Newfield Production will transport water by truck for drilling purposes from the following water sources:

Johnson Water District  
Water Right: 43-10136

Neil Moon Pond  
Water Right: 43-11787

Maurice Harvey Pond  
Water Right: 47-1358

Newfield Collector Well  
Water Right: 41-3530 (A30414DV, contracted with the Duchesne County Conservancy District).

Please refer to the Monument Butte Field SOP. See Exhibit "A".

6. **SOURCE OF CONSTRUCTION MATERIALS**

The proposed Jonah Federal B-15-9-16 will be drilled off of the existing Castle Peak Fed. 44-10-9-16 well pad. No additional surface disturbance will be required for this location.

7. **METHODS FOR HANDLING WASTE DISPOSAL**

Please refer to the Monument Butte Field SOP.

8. **ANCILLARY FACILITIES**

Please refer to the Monument Butte Field SOP.

9. **WELL SITE LAYOUT**

See attached Location Layout Diagram.

10. **PLANS FOR RESTORATION OF SURFACE**

Please refer to the Monument Butte Field SOP.

11. **SURFACE OWNERSHIP** - Bureau Of Land Management (Proposed location and access roads leading to).

12. **OTHER ADDITIONAL INFORMATION**

Newfield Production Company requests 340' of disturbed area be granted in Lease UTU-017985 to allow for construction of the proposed water lines. It is proposed that the disturbed area will temporarily be 50' wide to allow for construction of a buried 3" steel water injection line and a buried 3" poly water return line and 30' wide upon completion of the proposed water lines. **Refer to Topographic Map "C."** For a ROW plan of development, please refer to the Monument Butte Field SOP. In the event that the proposed well is converted to a water injection well, a separate injection permit will be applied for through the proper agencies.

The Archaeological Resource Survey and Paleontological Resource Survey for the 340' of proposed water injection line are attached. MOAC Report #08-138, 6/18/08. Paleontological Resource Survey prepared by, Wade E. Miller, 5/29/08. See attached report cover pages, **Exhibit "D"**.

**Water Disposal**

Immediately upon first production, all produced water will be confined to a steel storage tank. If the production water meets quality guidelines, it is transported to the Ashley, Monument Butte, Jonah, and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project.

Water not meeting quality criteria, is disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E), State of Utah approved surface disposal facilities, or Federally approved surface disposal facilities.

**Threatened, Endangered, And Other Sensitive Species**

None for the proposed Jonah Federal B-15-9-16 location

**Reserve Pit Liner**

A 16 mil liner with felt is required. Please refer to the Monument Butte Field SOP.

### Location and Reserve Pit Reclamation

Please refer to the Monument Butte Field SOP.

The following seed mixture will be used on the topsoil stockpile, to the recontoured surface of the reserve pit, and for final reclamation: (All poundages are in pure live seed)

Squirrel Tail	<i>Elymus Elymoides</i>	6 lbs/acre
Siberian Wheatgrass	<i>Agropyron Fragile</i>	2 lbs/acre
Gardner Saltbush	<i>Atriplex Gardneri</i>	1 lbs/acre
Shadscale	<i>Atriplex Confertifolia</i>	1 lbs/acre
Fourwing Saltbush	<i>Atriplex Canescens</i>	1 lbs/acre
Scarlet Globemallow	<i>Sphaeralcea Conccinea</i>	0.20 lbs/acre
Forage Kochia	<i>Kochia Prostrata</i>	0.20 lbs/acre

### Details of the On-Site Inspection

The proposed Jonah Federal B-15-9-16 was on-sited on 5/14/08. The following were present; Dave Allred (Newfield Production), Kevan Stevens (Newfield Production ), Michael Cutler (Bureau of Land Management), Brandon McDonald (Bureau of Land Management ), Dan Emmett (Bureau of Land Management ), and James Herford (Bureau of Land Management). Weather conditions were clear and ground cover was 100% open.

### LESSEE'S OR OPERATORS REPRESENTATIVE AND CERTIFICATION

#### Representative

Name: Dave Allred  
Address: Route #3 Box 3630  
Myton, UT 84052  
Telephone: (435) 646-3721

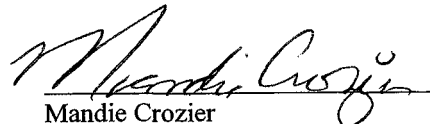
#### Certification

Please be advised that NEWFIELD PRODUCTION COMPANY is considered to be the operator of well #B-15-9-16 SE/SE Section 10, Township 9S, Range 16E: Lease UTU-017985 Duchesne County, Utah: and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by, Federal Bond #WYB000493.

I hereby certify that the proposed drill site and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Newfield Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

6/25/08

Date



Mandie Crozier  
Regulatory Specialist  
Newfield Production Company



**Scientific Drilling**  
Rocky Mountain Operations

Project: Duchesne County, UT NAD83 UTC  
Site: Jonah Unit  
Well: Jonah Unit B-15-9-16  
Wellbore: OH  
Design: Plan #1

**Newfield Exploration Co.**

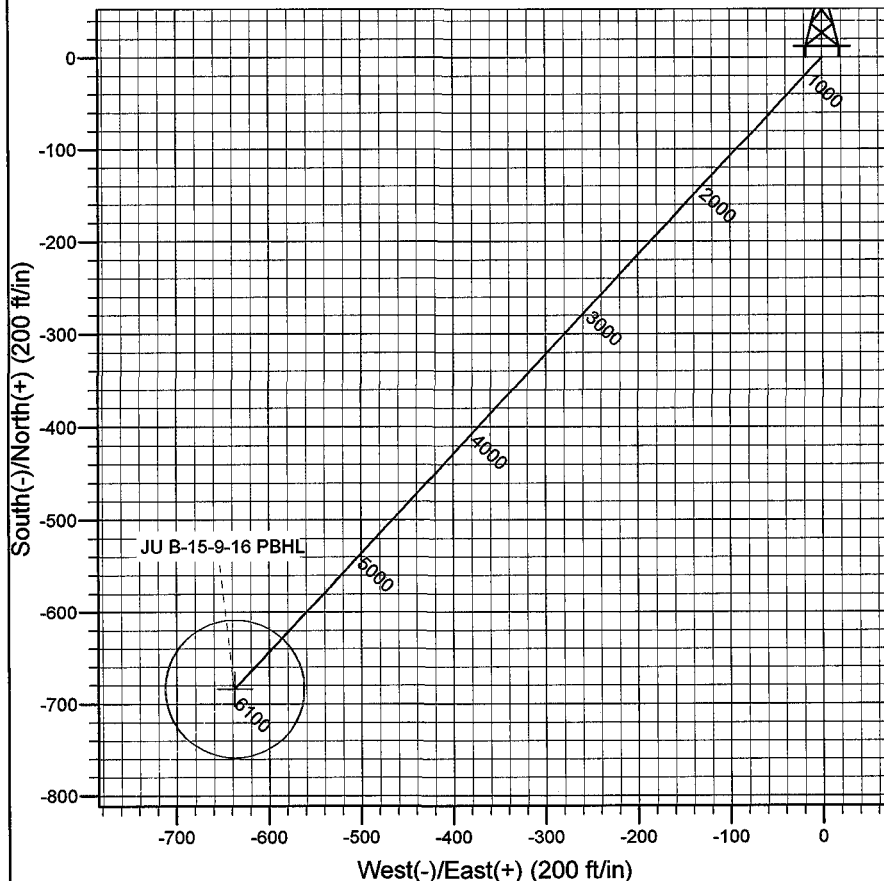
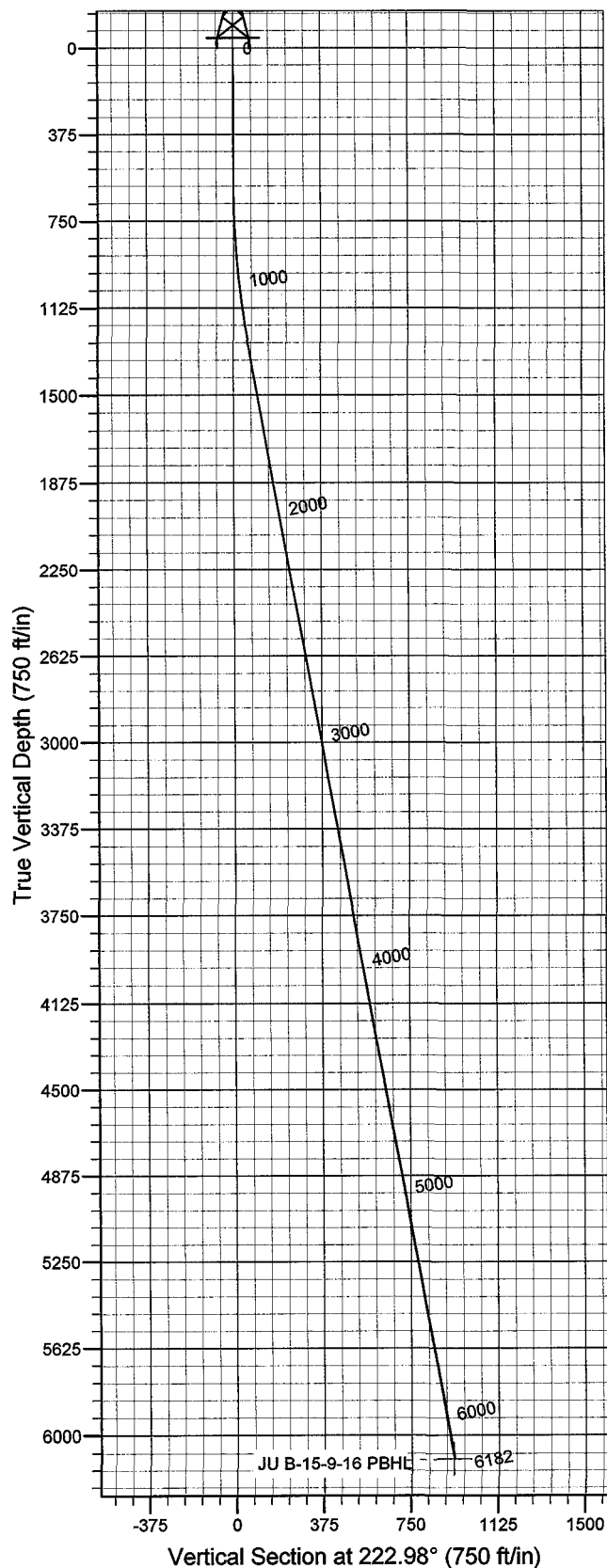


Azimuths to True North  
Magnetic North: 11.70°

Magnetic Field  
Strength: 52583.6snT  
Dip Angle: 65.87°  
Date: 2008-06-10  
Model: IGRF2005-10

WELL DETAILS: Jonah Unit B-15-9-16

GL 5698' & RKB 12' @ 5710.00ft 5698.00  
+N/-S 0.00 +E/-W 0.00 Northing 7186328.01 Easting 2032815.58 Latitude 40° 2' 23.460 N Longitude 110° 5' 54.240 W



Plan: Plan #1 (Jonah Unit B-15-9-16/OH)

Created By: Julie Cruse Date: 2008-06-10

PROJECT DETAILS: Duchesne County, UT NAD83 UTC

Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: Utah Central Zone  
Location:  
System Datum: Mean Sea Level  
Local North: True

#### SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	
1284.92	10.27	222.98	1281.25	-44.80	-41.75	1.50	222.98	61.24	
6182.18	10.27	222.98	6100.00	-683.80	-637.21	0.00	0.00	934.68	JU B-15-9-16 PBHL

# **Newfield Exploration Co.**

**Duchesne County, UT NAD83 UTC**

**Jonah Unit**

**Jonah Unit B-15-9-16**

**OH**

**Plan: Plan #1**

## **Standard Planning Report**

**10 June, 2008**



# Scientific Drilling

## Planning Report

**Database:** EDM 2003.16 Multi-User Db  
**Company:** Newfield Exploration Co.  
**Project:** Duchesne County, UT NAD83 UTC  
**Site:** Jonah Unit  
**Well:** Jonah Unit B-15-9-16  
**Wellbore:** OH  
**Design:** Plan #1

**Local Co-ordinate Reference:** Well Jonah Unit B-15-9-16  
**TVD Reference:** GL 5698' & RKB 12' @ 5710.00ft  
**MD Reference:** GL 5698' & RKB 12' @ 5710.00ft  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

**Project** Duchesne County, UT NAD83 UTC

**Map System:** US State Plane 1983  
**Geo Datum:** North American Datum 1983  
**Map Zone:** Utah Central Zone

**System Datum:** Mean Sea Level

**Site** Jonah Unit,

**Site Position:** Northing: 7,195,384.71 ft Latitude: 40° 3' 51.060 N  
**From:** Lat/Long Easting: 2,044,880.81 ft Longitude: 110° 3' 17.240 W  
**Position Uncertainty:** 0.00 ft Slot Radius: in Grid Convergence: 0.93 °

**Well** Jonah Unit B-15-9-16, 639' FSL 673' FEL Sec 10 T9S R16E

**Well Position** +N/-S 0.00 ft Northing: 7,186,328.01 ft Latitude: 40° 2' 23.460 N  
+/-W 0.00 ft Easting: 2,032,815.58 ft Longitude: 110° 5' 54.240 W  
**Position Uncertainty** 0.00 ft Wellhead Elevation: ft Ground Level: 5,698.00 ft

**Wellbore** OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2005-10	2008-06-10	11.70	65.87	52,584

**Design** Plan #1

**Audit Notes:**

**Version:** Phase: PLAN Tie On Depth: 0.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	222.98

### Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,284.92	10.27	222.98	1,281.25	-44.80	-41.75	1.50	1.50	0.00	222.98	
6,182.18	10.27	222.98	6,100.00	-683.80	-637.21	0.00	0.00	0.00	0.00	JU B-15-9-16 PBHL

# Scientific Drilling

## Planning Report

**Database:** EDM 2003.16 Multi-User Db  
**Company:** Newfield Exploration Co.  
**Project:** Duchesne County, UT NAD83 UTC  
**Site:** Jonah Unit  
**Well:** Jonah Unit B-15-9-16  
**Wellbore:** OH  
**Design:** Plan #1

**Local Co-ordinate Reference:** Well Jonah Unit B-15-9-16  
**TVD Reference:** GL 5698' & RKB 12' @ 5710.00ft  
**MD Reference:** GL 5698' & RKB 12' @ 5710.00ft  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

### Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	1.50	222.98	699.99	-0.96	-0.89	1.31	1.50	1.50	0.00
800.00	3.00	222.98	799.91	-3.83	-3.57	5.23	1.50	1.50	0.00
900.00	4.50	222.98	899.69	-8.61	-8.03	11.77	1.50	1.50	0.00
1,000.00	6.00	222.98	999.27	-15.31	-14.27	20.92	1.50	1.50	0.00
1,100.00	7.50	222.98	1,098.57	-23.91	-22.28	32.68	1.50	1.50	0.00
1,200.00	9.00	222.98	1,197.54	-34.40	-32.06	47.03	1.50	1.50	0.00
1,284.92	10.27	222.98	1,281.25	-44.80	-41.75	61.24	1.50	1.50	0.00
1,300.00	10.27	222.98	1,296.09	-46.77	-43.59	63.93	0.00	0.00	0.00
1,400.00	10.27	222.98	1,394.49	-59.82	-55.74	81.77	0.00	0.00	0.00
1,500.00	10.27	222.98	1,492.89	-72.87	-67.90	99.60	0.00	0.00	0.00
1,600.00	10.27	222.98	1,591.28	-85.92	-80.06	117.44	0.00	0.00	0.00
1,700.00	10.27	222.98	1,689.68	-98.96	-92.22	135.27	0.00	0.00	0.00
1,800.00	10.27	222.98	1,788.08	-112.01	-104.38	153.11	0.00	0.00	0.00
1,900.00	10.27	222.98	1,886.47	-125.06	-116.54	170.94	0.00	0.00	0.00
2,000.00	10.27	222.98	1,984.87	-138.11	-128.70	188.78	0.00	0.00	0.00
2,100.00	10.27	222.98	2,083.27	-151.16	-140.86	206.61	0.00	0.00	0.00
2,200.00	10.27	222.98	2,181.66	-164.21	-153.02	224.45	0.00	0.00	0.00
2,300.00	10.27	222.98	2,280.06	-177.25	-165.18	242.28	0.00	0.00	0.00
2,400.00	10.27	222.98	2,378.46	-190.30	-177.33	260.12	0.00	0.00	0.00
2,500.00	10.27	222.98	2,476.85	-203.35	-189.49	277.95	0.00	0.00	0.00
2,600.00	10.27	222.98	2,575.25	-216.40	-201.65	295.79	0.00	0.00	0.00
2,700.00	10.27	222.98	2,673.65	-229.45	-213.81	313.63	0.00	0.00	0.00
2,800.00	10.27	222.98	2,772.04	-242.49	-225.97	331.46	0.00	0.00	0.00
2,900.00	10.27	222.98	2,870.44	-255.54	-238.13	349.30	0.00	0.00	0.00
3,000.00	10.27	222.98	2,968.84	-268.59	-250.29	367.13	0.00	0.00	0.00
3,100.00	10.27	222.98	3,067.23	-281.64	-262.45	384.97	0.00	0.00	0.00
3,200.00	10.27	222.98	3,165.63	-294.69	-274.61	402.80	0.00	0.00	0.00
3,300.00	10.27	222.98	3,264.03	-307.73	-286.77	420.64	0.00	0.00	0.00
3,400.00	10.27	222.98	3,362.42	-320.78	-298.93	438.47	0.00	0.00	0.00
3,500.00	10.27	222.98	3,460.82	-333.83	-311.08	456.31	0.00	0.00	0.00
3,600.00	10.27	222.98	3,559.22	-346.88	-323.24	474.14	0.00	0.00	0.00
3,700.00	10.27	222.98	3,657.61	-359.93	-335.40	491.98	0.00	0.00	0.00
3,800.00	10.27	222.98	3,756.01	-372.97	-347.56	509.81	0.00	0.00	0.00
3,900.00	10.27	222.98	3,854.41	-386.02	-359.72	527.65	0.00	0.00	0.00
4,000.00	10.27	222.98	3,952.80	-399.07	-371.88	545.48	0.00	0.00	0.00
4,100.00	10.27	222.98	4,051.20	-412.12	-384.04	563.32	0.00	0.00	0.00
4,200.00	10.27	222.98	4,149.60	-425.17	-396.20	581.15	0.00	0.00	0.00
4,300.00	10.27	222.98	4,247.99	-438.22	-408.36	598.99	0.00	0.00	0.00
4,400.00	10.27	222.98	4,346.39	-451.26	-420.52	616.82	0.00	0.00	0.00
4,500.00	10.27	222.98	4,444.79	-464.31	-432.67	634.66	0.00	0.00	0.00
4,600.00	10.27	222.98	4,543.18	-477.36	-444.83	652.49	0.00	0.00	0.00
4,700.00	10.27	222.98	4,641.58	-490.41	-456.99	670.33	0.00	0.00	0.00
4,800.00	10.27	222.98	4,739.98	-503.46	-469.15	688.16	0.00	0.00	0.00
4,900.00	10.27	222.98	4,838.37	-516.50	-481.31	706.00	0.00	0.00	0.00
5,000.00	10.27	222.98	4,936.77	-529.55	-493.47	723.84	0.00	0.00	0.00
5,100.00	10.27	222.98	5,035.17	-542.60	-505.63	741.67	0.00	0.00	0.00
5,200.00	10.27	222.98	5,133.56	-555.65	-517.79	759.51	0.00	0.00	0.00

# Scientific Drilling Planning Report

**Database:** EDM 2003.16 Multi-User Db  
**Company:** Newfield Exploration Co.  
**Project:** Duchesne County, UT NAD83 UTC  
**Site:** Jonah Unit  
**Well:** Jonah Unit B-15-9-16  
**Wellbore:** OH  
**Design:** Plan #1

**Local Co-ordinate Reference:** Well Jonah Unit B-15-9-16  
**TVD Reference:** GL 5698' & RKB 12' @ 5710.00ft  
**MD Reference:** GL 5698' & RKB 12' @ 5710.00ft  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

## Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Bulld Rate (°/100ft)	Turn Rate (°/100ft)
5,300.00	10.27	222.98	5,231.96	-568.70	-529.95	777.34	0.00	0.00	0.00
5,400.00	10.27	222.98	5,330.36	-581.74	-542.11	795.18	0.00	0.00	0.00
5,500.00	10.27	222.98	5,428.75	-594.79	-554.26	813.01	0.00	0.00	0.00
5,600.00	10.27	222.98	5,527.15	-607.84	-566.42	830.85	0.00	0.00	0.00
5,700.00	10.27	222.98	5,625.55	-620.89	-578.58	848.68	0.00	0.00	0.00
5,800.00	10.27	222.98	5,723.94	-633.94	-590.74	866.52	0.00	0.00	0.00
5,900.00	10.27	222.98	5,822.34	-646.98	-602.90	884.35	0.00	0.00	0.00
6,000.00	10.27	222.98	5,920.74	-660.03	-615.06	902.19	0.00	0.00	0.00
6,100.00	10.27	222.98	6,019.13	-673.08	-627.22	920.02	0.00	0.00	0.00
6,182.18	10.27	222.98	6,100.00	-683.80	-637.21	934.68	0.00	0.00	0.00

## Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
JU B-15-9-16 PBHL - plan hits target center - Circle (radius 75.00)	0.00	0.00	6,100.00	-683.80	-637.21	7,185,634.30	2,032,189.17	40° 2' 16.702 N	110° 6' 2.433 W

# NEWFIELD PRODUCTION COMPANY

## WELL PAD INTERFERENCE PLAT

JONAH UNIT B-15-9-16 (Proposed Well)

JONAH UNIT 44-10-9-16 (Existing Well)

Pad Location: SESE Section 10, T9S, R16E, S.L.B.&M.

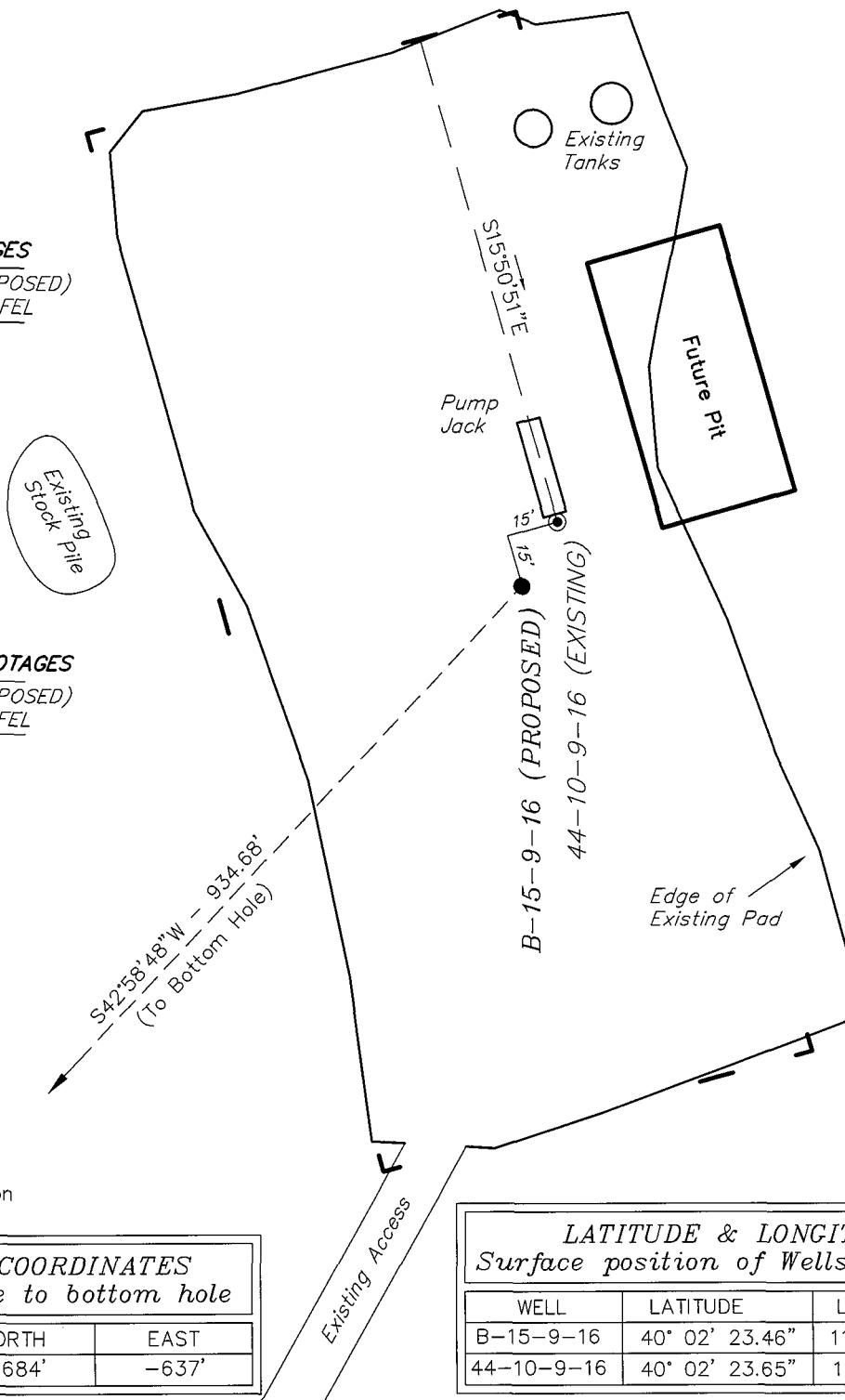


### TOP HOLE FOOTAGES

B-15-9-16 (PROPOSED)  
639' FSL & 673' FEL

### BOTTOM HOLE FOOTAGES

B-15-9-16 (PROPOSED)  
45' FNL & 1310' FEL



### Note:

Bearings are based on  
GLO Information.

### RELATIVE COORDINATES From top hole to bottom hole

WELL	NORTH	EAST
B-15-9-16	-684'	-637'

### LATITUDE & LONGITUDE Surface position of Wells (NAD 83)

WELL	LATITUDE	LONGITUDE
B-15-9-16	40° 02' 23.46"	110° 05' 54.24"
44-10-9-16	40° 02' 23.65"	110° 05' 54.11"

SURVEYED BY: T.H. DATE SURVEYED: 04-26-08  
DRAWN BY: F.T.M. DATE DRAWN: 04-30-08  
SCALE: 1" = 50' REVISED:

**Tri State**  
Land Surveying, Inc.  
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

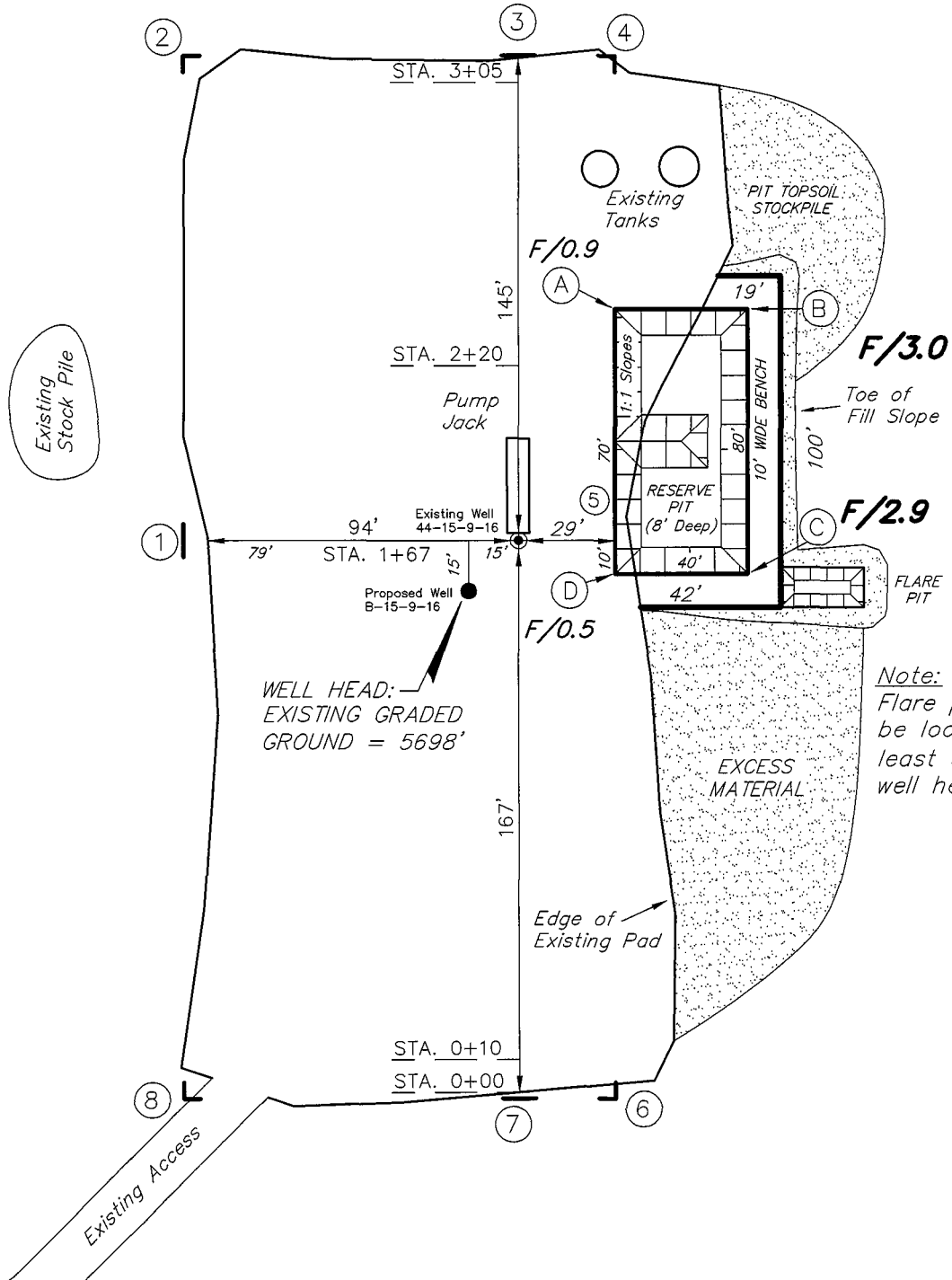
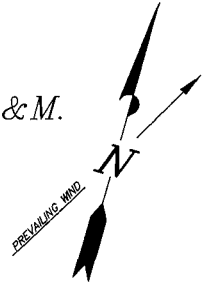
(435) 781-2501

# NEWFIELD PRODUCTION COMPANY

JONAH UNIT B-15-9-16 (Proposed Well)

JONAH UNIT 44-10-9-16 (Existing Well)

Pad Location: SESE Section 10, T9S, R16E, S.L.B.&M.



SURVEYED BY: T.H.	DATE SURVEYED: 04-26-08
DRAWN BY: F.T.M.	DATE DRAWN: 04-29-08
SCALE: 1" = 50'	REVISED:

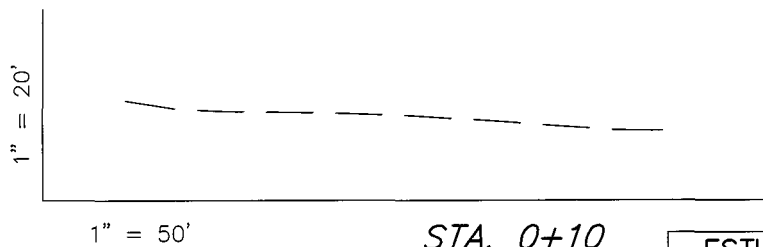
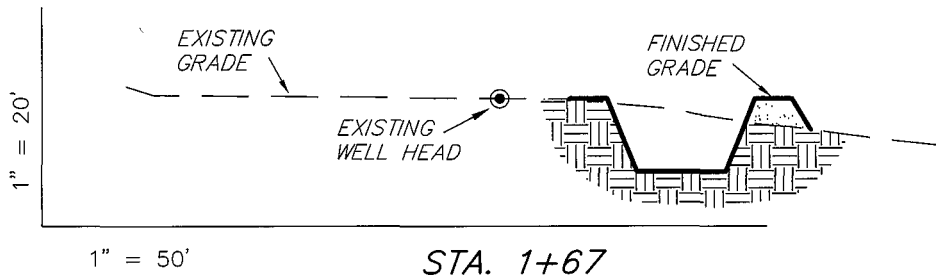
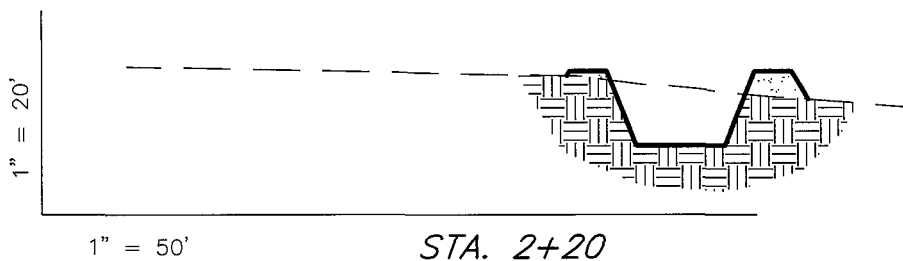
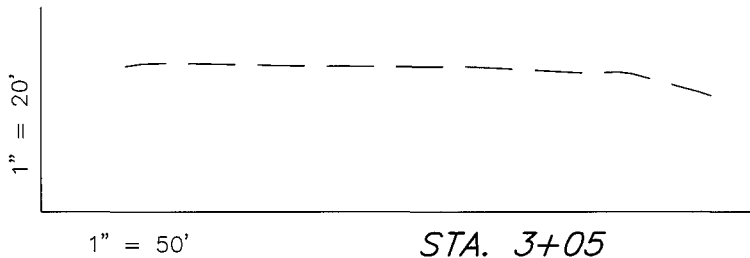
**Tri State**  
Land Surveying, Inc.  
180 NORTH VERNAL AVE. VERNAL, UTAH 84078  
(435) 781-2501

# NEWFIELD PRODUCTION COMPANY

## CROSS SECTIONS

JONAH UNIT B-15-9-16 (Proposed Well)

JONAH UNIT 44-10-9-16 (Existing Well)



NOTE:  
UNLESS OTHERWISE  
NOTED ALL CUT/FILL  
SLOPES ARE AT 1.5:1

ESTIMATED EARTHWORK QUANTITIES (No Shrink or swell adjustments have been used) (Expressed in Cubic Yards)				
ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	300	300	Topsoil is not included in Pad Cut	0
PIT	170	0		170
TOTALS	470	300	140	170

SURVEYED BY: T.H.	DATE SURVEYED: 04-26-08
DRAWN BY: F.T.M.	DATE DRAWN: 04-29-08
SCALE: 1" = 50'	REVISED:

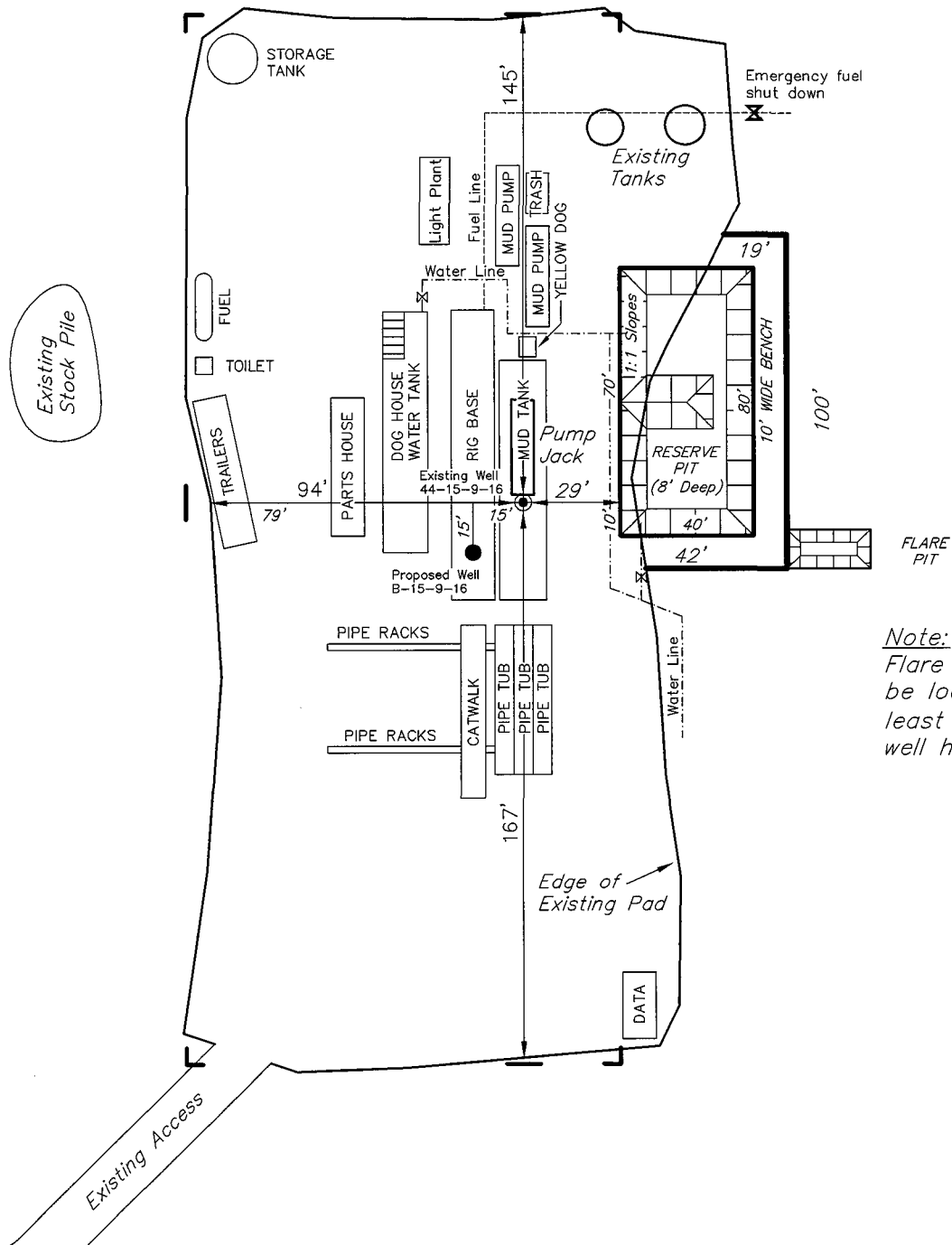
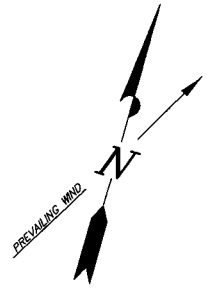
**Tri State**  
Land Surveying, Inc.  
180 NORTH VERNAL AVE. VERNAL, UTAH 84078  
(435) 781-2501

# NEWFIELD PRODUCTION COMPANY

## TYPICAL RIG LAYOUT

JONAH UNIT B-15-9-16 (Proposed Well)

JONAH UNIT 44-10-9-16 (Existing Well)



Note:  
Flare pit is to be located at least 80' from well head.

SURVEYED BY: T.H.	DATE SURVEYED: 04-26-08
DRAWN BY: F.T.M.	DATE DRAWN: 04-29-08
SCALE: 1" = 50'	REVISED:

**Tri State**  
Land Surveying, Inc.  
(435) 781-2501  
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

# Newfield Production Company Proposed Site Facility Diagram

Jonah Federal B-15-9-16

From the 44-10-9-16 Location

SE/SE Sec. 10, T9S, R16E

Duchesne County, Utah

UTU-017985

Site Security Plan is held at the Pleasant Valley  
Office, Duchesne County Utah

## Production Phase:

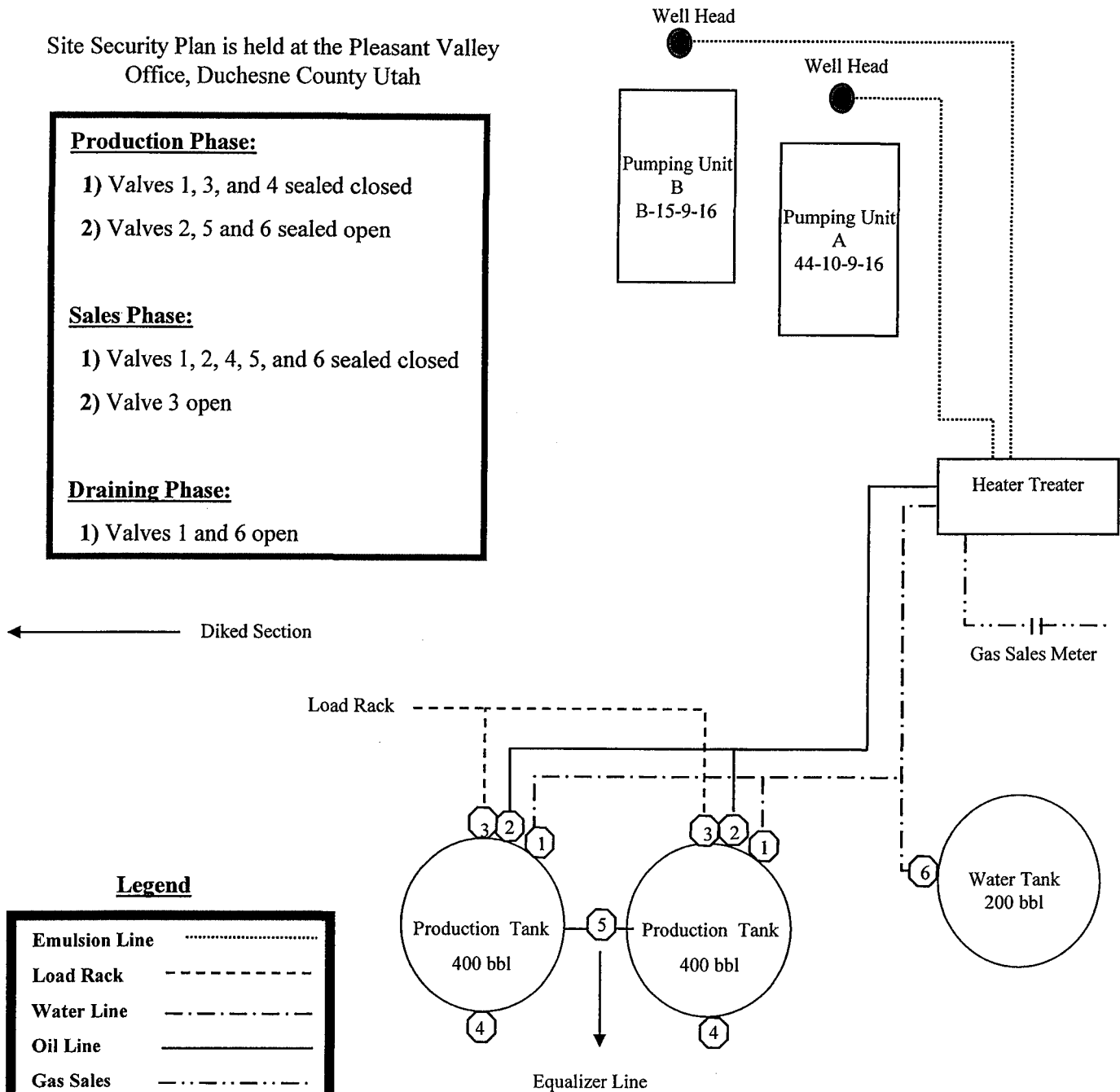
- 1) Valves 1, 3, and 4 sealed closed
- 2) Valves 2, 5 and 6 sealed open

## Sales Phase:

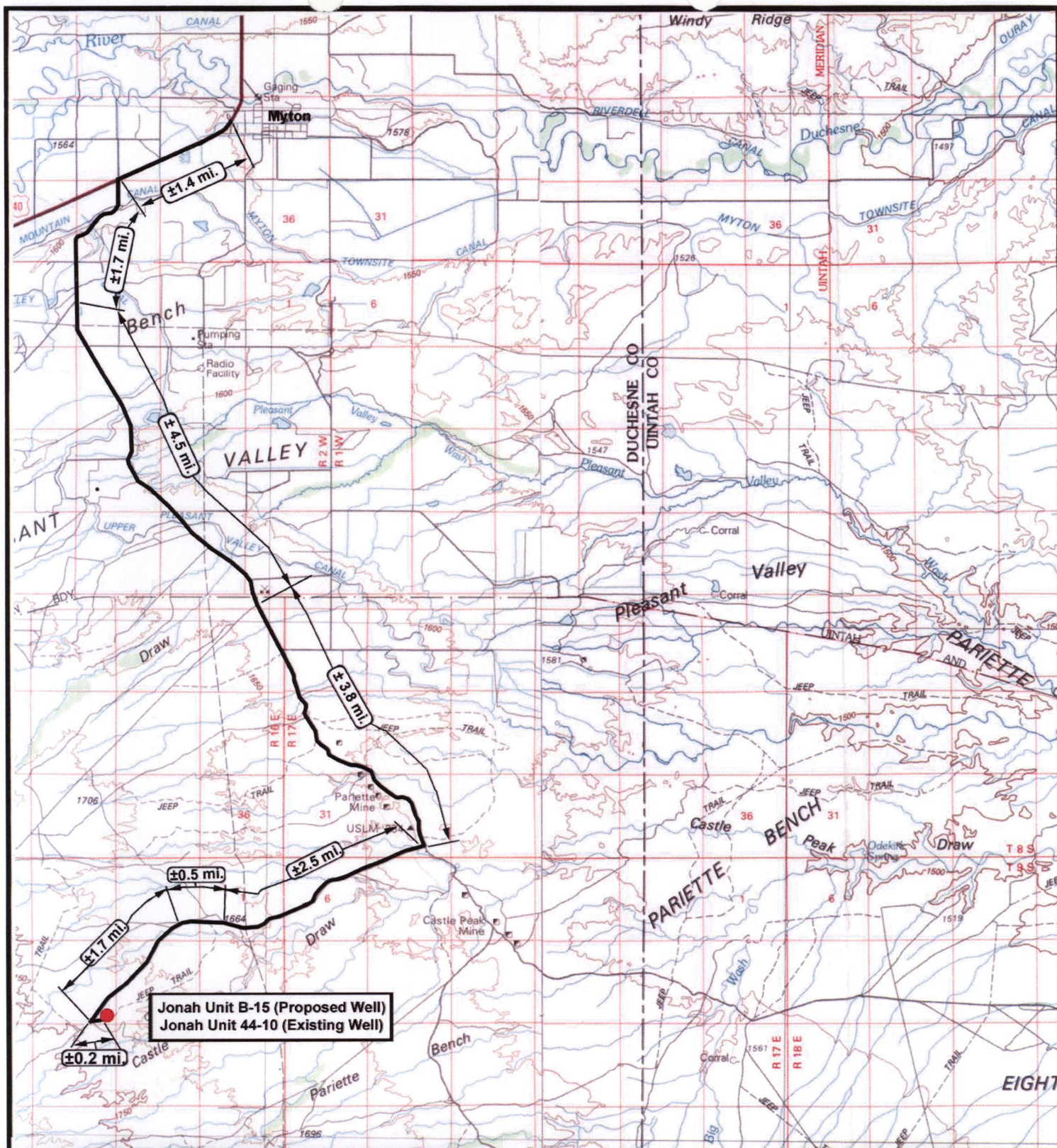
- 1) Valves 1, 2, 4, 5, and 6 sealed closed
- 2) Valve 3 open


## Draining Phase:

- 1) Valves 1 and 6 open









**NEWFIELD**  
Exploration Company

---

**Jonah Unit B-15-9-16 (Proposed Well)**  
**Jonah Unit 44-10-9-16 (Existing Well)**  
 Pad Location: SESE SEC. 10, T9S, R16E, S.L.B.&M.



**Tri-State**  
Land Surveying Inc.  
(435) 781-2501  
180 North Vernal Ave. Vernal, Utah 84078

---

SCALE: 1:100,000  
 DRAWN BY: nc  
 DATE: 05-07-2008

**Legend**

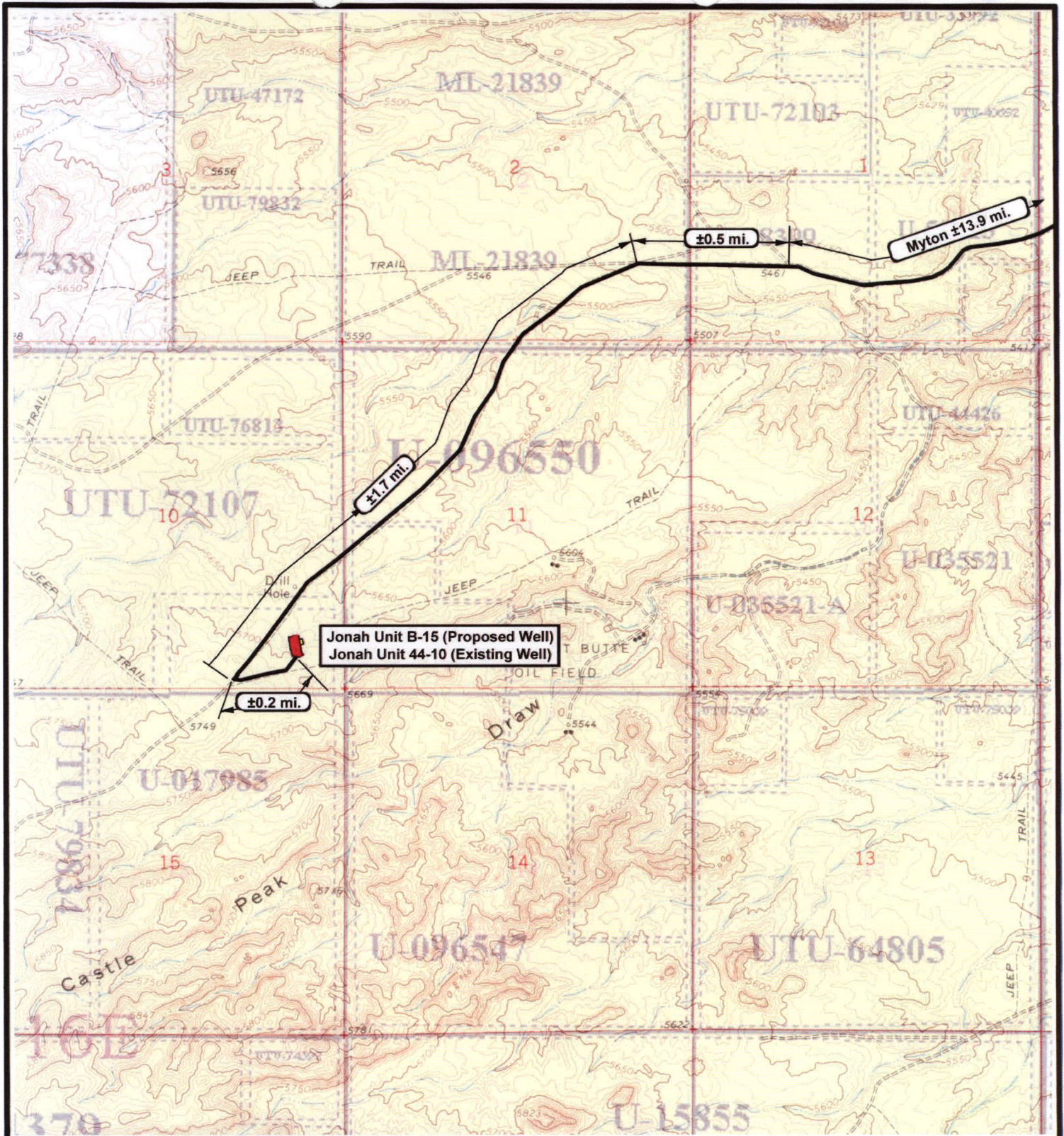
Existing Road


---

TOPOGRAPHIC MAP

A







**NEWFIELD**  
Exploration Company

---

**Jonah Unit B-15-9-16 (Proposed Well)**  
**Jonah Unit 44-10-9-16 (Existing Well)**  
 Pad Location SESE SEC. 10, T9S, R16E, S.L.B.&M.




**Tri-State**  
Land Surveying Inc.  
(435) 781-2501  
180 North Vernal Ave. Vernal, Utah 84078

---

SCALE: 1" = 2,000'  
 DRAWN BY: nc  
 DATE: 05-07-2008

**Legend**

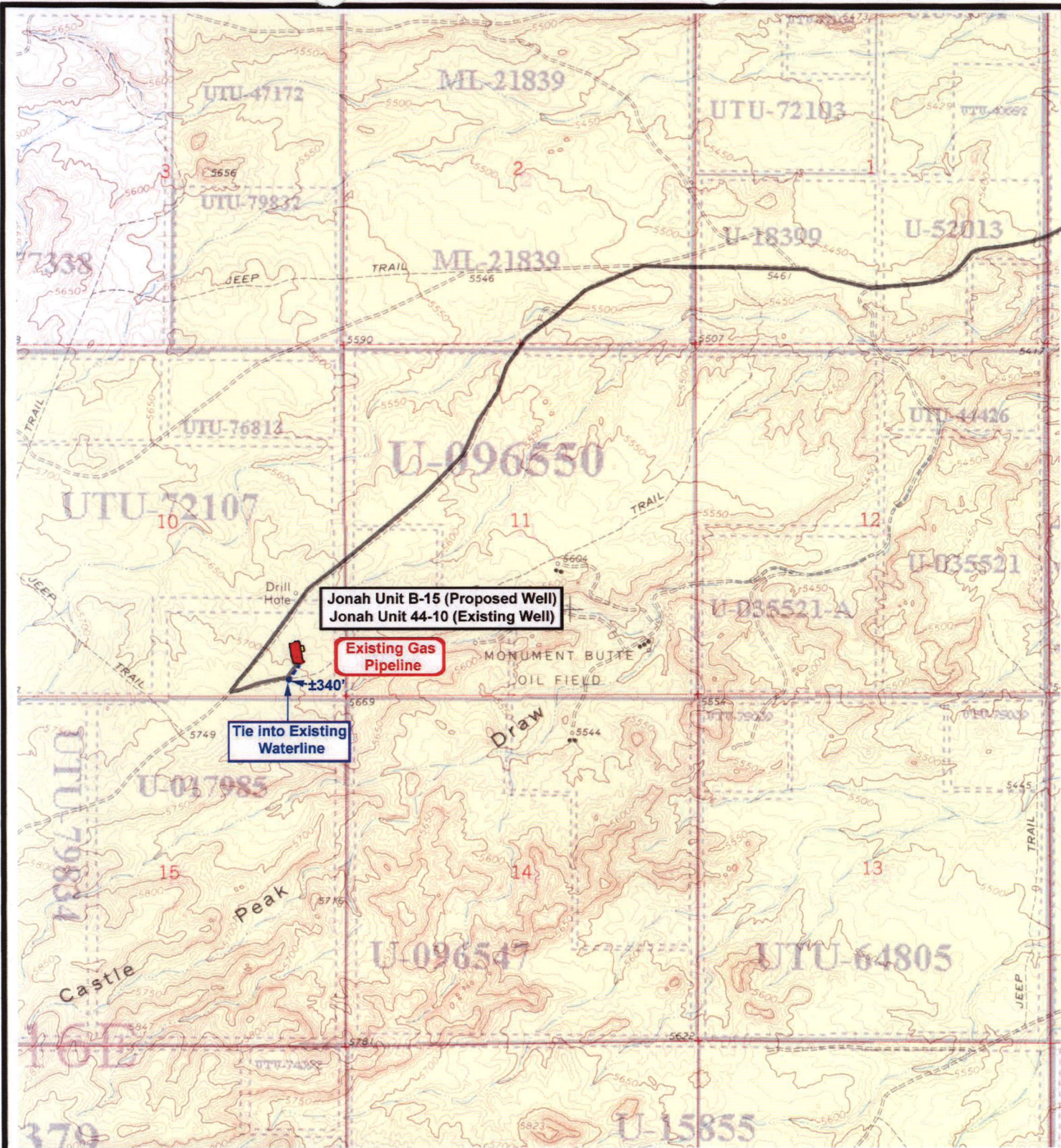
 Existing Road


---

**TOPOGRAPHIC MAP**

**"B"**







**NEWFIELD**  
Exploration Company

**Jonah Unit B-15-9-16 (Proposed Well)**  
**Jonah Unit 44-10-9-16 (Existing Well)**  
 Pad Location SESE SEC. 10, T9S, R16E, S.L.B.&M.





**Tri-State**  
Land Surveying Inc.  
(435) 781-2501  
180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1" = 2,000'

DRAWN BY: nc

DATE: 05-07-2008

**Legend**

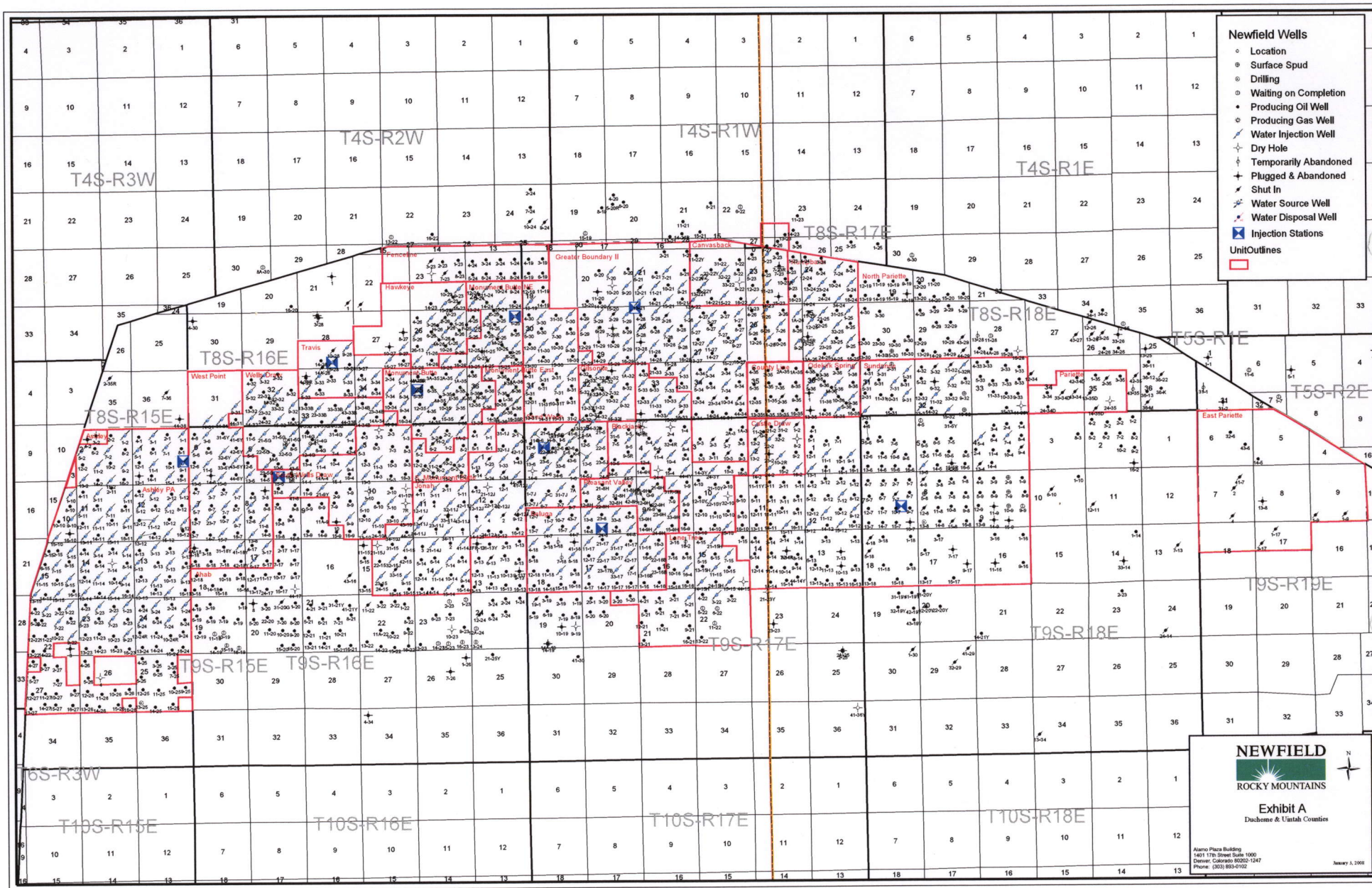
Roads

Proposed Water Line

TOPOGRAPHIC MAP

**"C"**





# Newfield Wells

- Location
- Surface Spud
- Drilling
- Waiting on Completion
- Producing Oil Well
- Producing Gas Well
- Water Injection Well
- Dry Hole
- Temporarily Abandoned
- Plugged & Abandoned
- Shut In
- Water Source Well
- Water Disposal Well
- Injection Stations

Unit Outlines

Unit Outlines

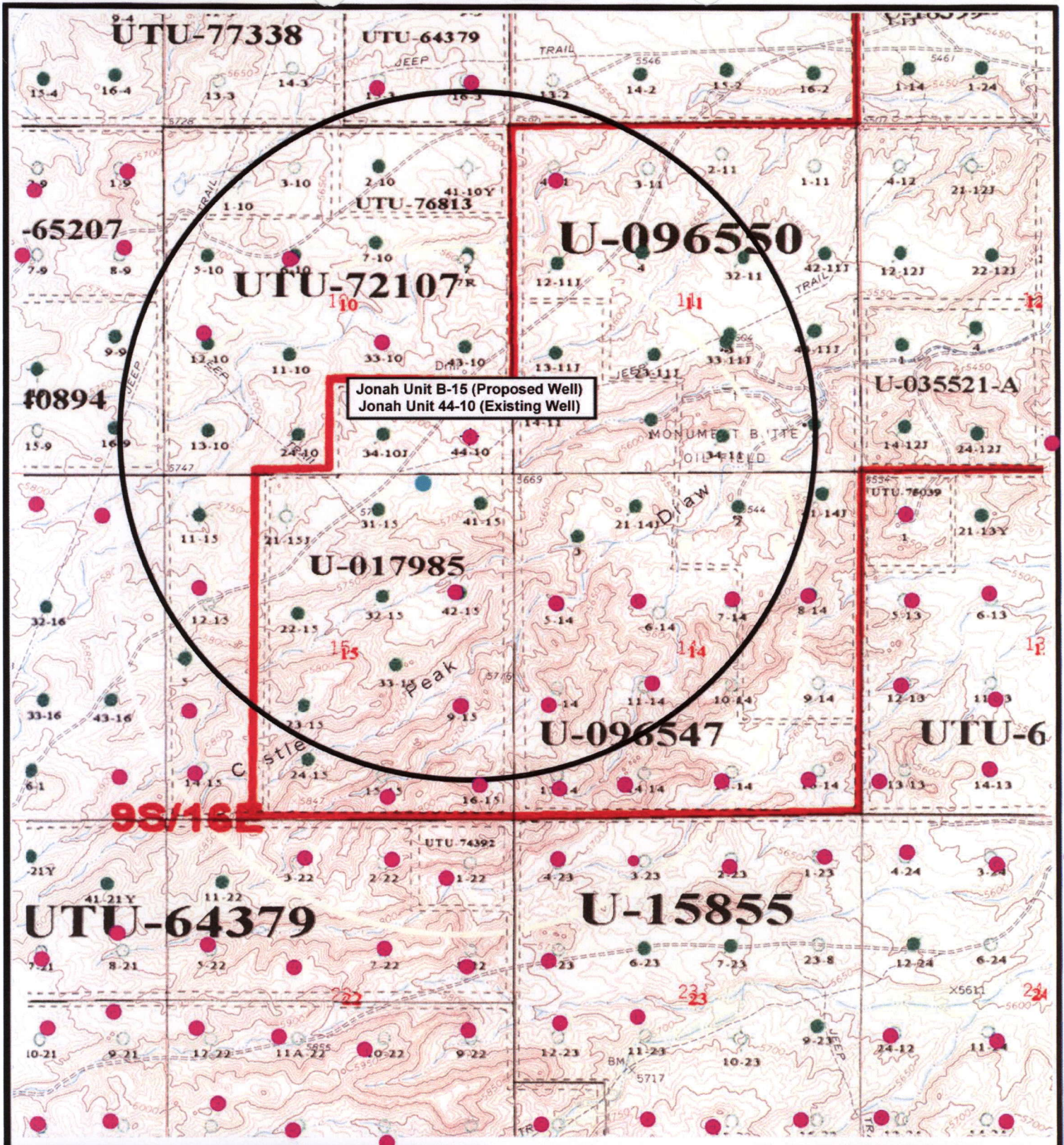


Exhibit A  
Duchene & Uintah Counties

Alamo Plaza Building  
1401 17th Street Suite 1000  
Denver, Colorado 80202-1247  
Phone: (303) 893-0102


January 3, 2003





Jonah Unit B-15 (Proposed Well)  
Jonah Unit 44-10 (Existing Well)

9S/16E



**NEWFIELD**  
Exploration Company

**Jonah Unit B-15-9-16 (Proposed Well)**  
**Jonah Unit 44-10-9-16 (Existing Well)**  
 Pad Location SESE SEC. 10, T9S, R16E, S.L.B.&M.





**Tri-State**  
Land Surveying Inc.  
(435) 781-2501  
180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1" = 2,000'  
 DRAWN BY: nc  
 DATE: 05-07-2008

**Legend**

- Pad Location
- Bottom Hole Location
- One-Mile Radius

**Exhibit "B"**



# 2-M SYSTEM

Blowout Prevention Equipment Systems

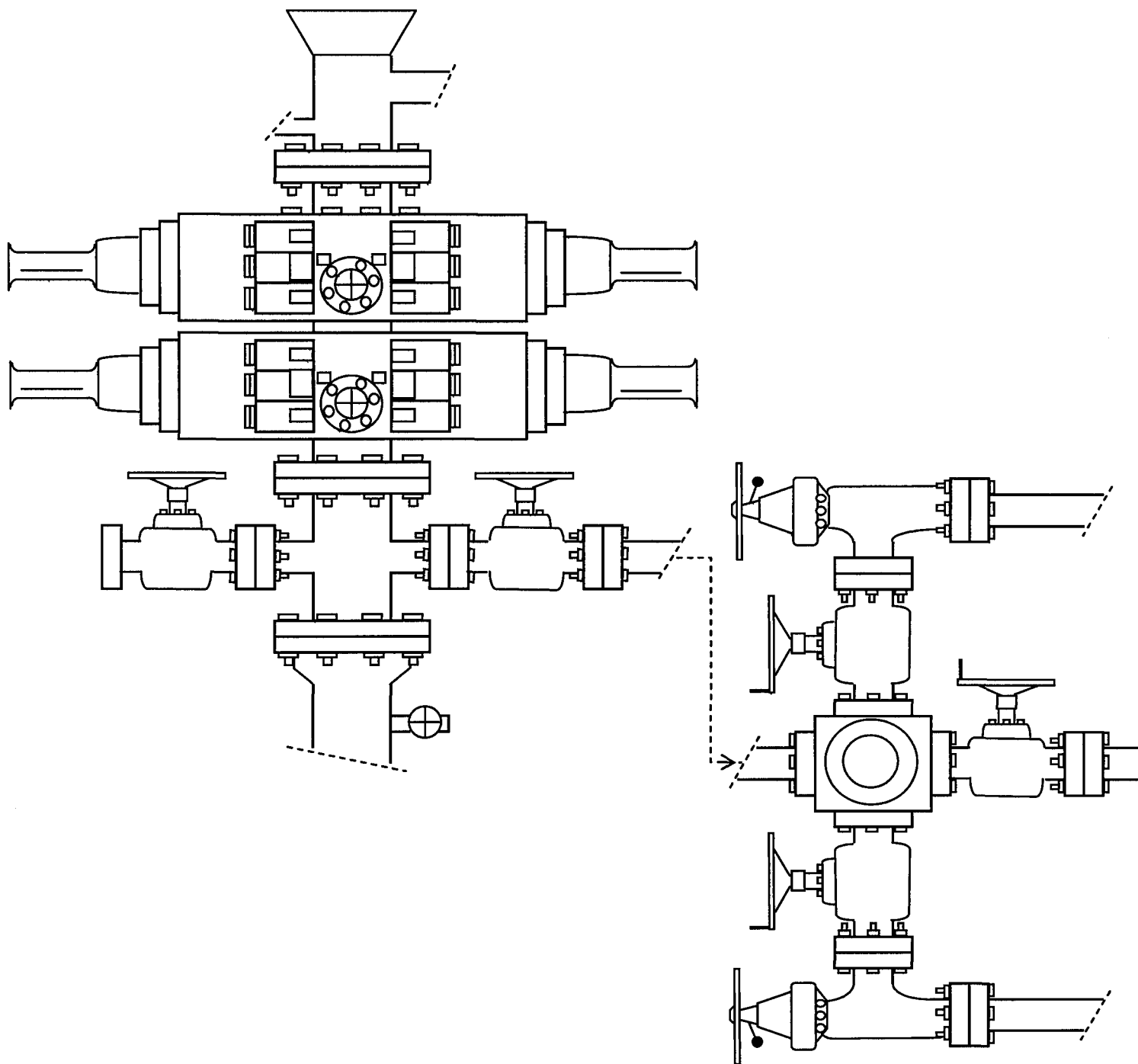


EXHIBIT C

Exhibit "D"  
10F2

CULTURAL RESOURCE INVENTORY OF  
NEWFIELD EXPLORATION'S TWO PROPOSED  
WATERLINES JONAH UNIT 44-10-9-16 AND 42-15-9-16  
(T9S, R16E, SECTIONS 10 AND 15)  
DUCHESNE COUNTY, UTAH

---

By:

Elizabeth Hora

Prepared for:

Bureau of Land Management  
Vernal Field Office

Prepared Under Contract With:

Newfield Exploration Company  
Rt. 3 Box 3630  
Myton, Utah 84052

Submitted By:

Montgomery Archaeological Consultants, Inc.  
P.O. Box 219  
Moab, Utah 84532

MOAC Report No. 08-138

June 18, 2008

United States Department of Interior (FLPMA)  
Permit No. 08-UT-60122

State of Utah Antiquities Project (Survey)  
Permit No. U-08-MQ-0473b

2 of 2

**NEWFIELD EXPLORATION COMPANY**

**PALEONTOLOGICAL SURVEY OF PROPOSED  
PRODUCTION DEVELOPMENT AREAS,  
DUCHESNE & UINTAH COUNTIES, UTAH**

NE 1/4, NE 1/4 & SW 1/4, NE 1/4, Section 35, T 9 S, R 18 E (1 & 7-35-9-18);  
NE 1/4, SW 1/4, & SE 1/4, NE 1/4, Section 34, T 8 S, R 18 E (11 & 42-34-8-18);  
SE 1/4, SE 1/4, Section 10, T 9 S, R 16 E (44-10-9-16);  
SE 1/4, NE 1/4, Section 15, T 9 S, R 16 E (42-15-9-16);  
SE 1/4, SW 1/4, Section 27, T 8 S, R 17 E (14-27-8-17)

**REPORT OF SURVEY**

Prepared for:

**Newfield Exploration Company**

Prepared by:

Wade E. Miller  
Consulting Paleontologist  
May 29, 2008



**WORKSHEET**  
**APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 06/27/2008

API NO. ASSIGNED: 43-013-34016

WELL NAME: JONAH FED B-15-9-16

OPERATOR: NEWFIELD PRODUCTION ( N2695 )

PHONE NUMBER: 435-646-3721

CONTACT: MANDIE CROZIER

PROPOSED LOCATION:

SESE 10 090S 160E

SURFACE: 0639 FSL 0673 FEL

BOTTOM: 0045 FNL 1310 FEL

COUNTY: DUCHESNE

LATITUDE: 40.03980 LONGITUDE: -110.0978

UTM SURF EASTINGS: 576973 NORTHINGS: 4432354

FIELD NAME: MONUMENT BUTTE ( 105 )

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering		
Geology		
Surface		

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-017985

SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: GRRV

COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

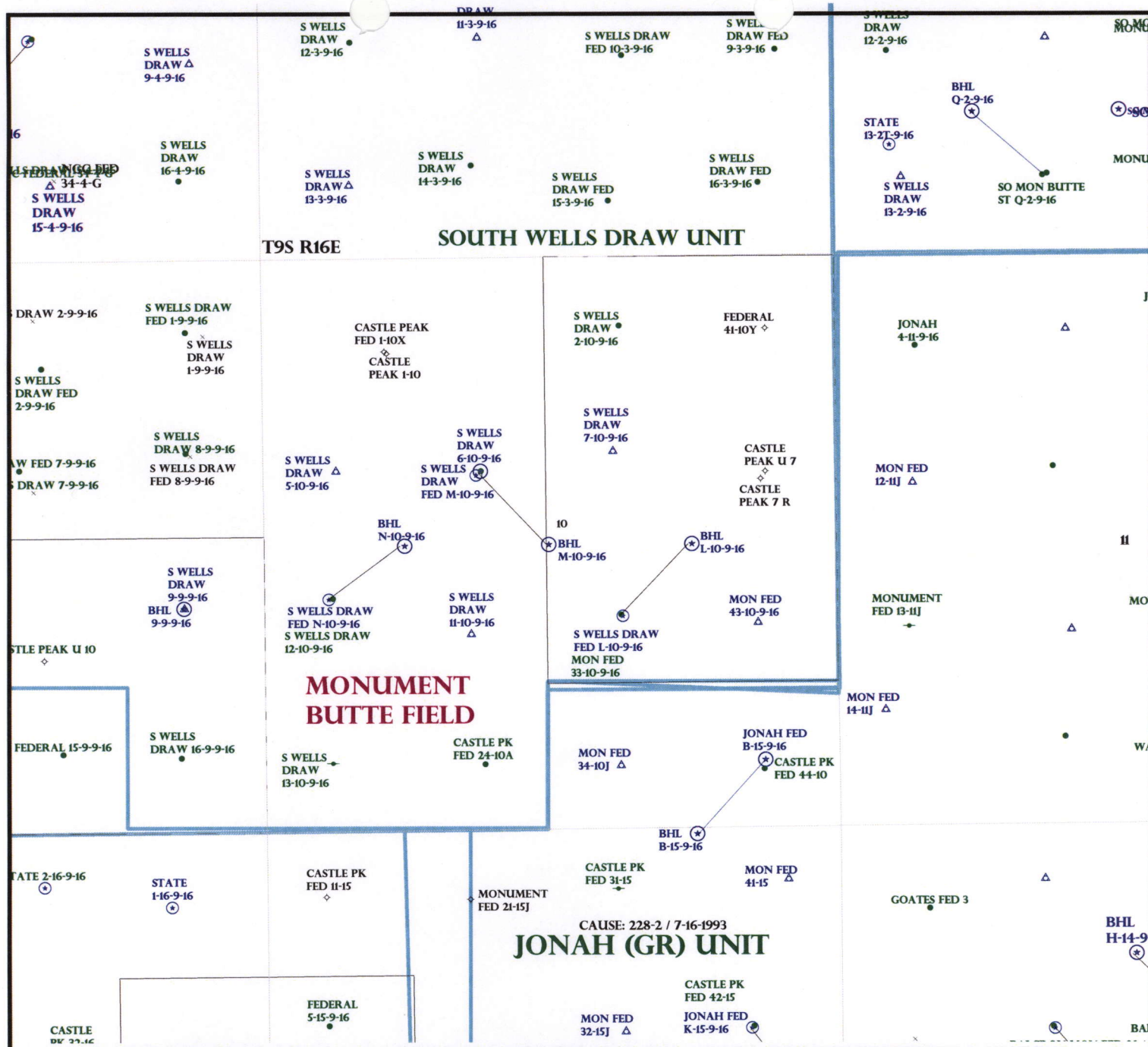
☒ Plat  
☒ Bond: Fed[1] Ind[] Sta[] Fee[]  
(No. WYB000493 )  
☒ Potash (Y/N)  
☒ Oil Shale 190-5 (B) or 190-3 or 190-13  
☒ Water Permit  
(No. 43-10136 )  
☒ RDCC Review (Y/N)  
(Date: )  
☒ Fee Surf Agreement (Y/N)  
☒ Intent to Commingle (Y/N)

LOCATION AND SITING:

☐ R649-2-3.  
Unit: JONAH (GRRV)  
☐ R649-3-2. General  
Siting: 460 From Qtr/Qtr & 920' Between Wells  
☐ R649-3-3. Exception  
☒ Drilling Unit  
Board Cause No: 228-2  
Eff Date: 7-16-1993  
Siting: ~~Can not suspend General Drilling~~  
☒ R649-3-11. Directional Drill

COMMENTS: Sep, Separate file

STIPULATIONS: 1- Federal Approval



OPERATOR: NEWFIELD PROD CO (N2695)

SEC: 10 T.9S R. 16E

FIELD: MONUMENT BUTTE (105)

COUNTY: DUCHESNE

CAUSE: 228-2 / 7-16-1993

**Field Status**

- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- PROPOSED
- STORAGE
- TERMINATED

**Unit Status**

- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PENDING
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

**Wells Status**

- GAS INJECTION
- GAS STORAGE
- LOCATION ABANDONED
- NEW LOCATION
- PLUGGED & ABANDONED
- PRODUCING GAS
- PRODUCING OIL
- SHUT-IN GAS
- SHUT-IN OIL
- TEMP. ABANDONED
- TEST WELL
- WATER INJECTION
- WATER SUPPLY
- WATER DISPOSAL
- DRILLING



OIL, GAS & MINING



PREPARED BY: DIANA MASON  
DATE: 27-JUNE-2008



June 30, 2008

State of Utah, Division of Oil, Gas and Mining  
ATTN: Diana Mason  
PO Box 145801  
Salt Lake City, UT 84114-5801

RE: Directional Drilling  
**Jonah Federal B-15-9-16**  
Jonah Unit  
UTU-72086A  
Surface Hole: T9S R16E, Section 10: SESE  
639' FSL 673' FEL  
Bottom Hole: T9S R16E, Section 15  
45' FNL 1310' FEL  
Duchesne County, Utah

Dear Ms. Mason;

Pursuant to the filing of Newfield Production Company's ("NPC") Application for Permit to Drill dated June 25, 2008, a copy of which is attached, for the above referenced well, and in accordance with Oil and Gas Conservation Rule R649-3-11, NPC hereby submits this letter as notice of our intention to directionally drill this well.

The surface hole location and bottom hole location of this well are both within the boundaries of the Jonah Unit UTU-72086A. Newfield certifies that it is the Jonah Unit Operator and all lands within 460 feet of the entire directional well bore are within the Jonah Unit.

NPC is permitting this well as a directional well in order to minimize surface disturbance. By directionally drilling from the referenced surface location, NPC will be able to utilize the existing roads and pipelines in this area.

NPC hereby requests our application for permit to drill be granted pursuant to R649-3-11. If you have any questions or require further information, please do not hesitate to contact the undersigned at 303-382-4444 or by email at [reveland@newfield.com](mailto:reveland@newfield.com). Your consideration of this matter is greatly appreciated.

Sincerely,

A handwritten signature in cursive script that reads "Roxann Eveland".

Roxann Eveland  
Land Associate

RECEIVED

JUL 02 2008

DIV. OF OIL, GAS & MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

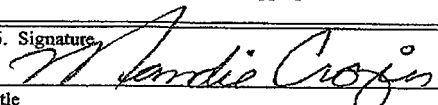
FORM APPROVED  
OMB No. 1004-0136  
Expires January 31, 2004

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER			5. Lease Serial No. UTU-017985	
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone			6. If Indian, Allottee or Tribe Name N/A	
2. Name of Operator Newfield Production Company			7. If Unit or CA Agreement, Name and No. Jonah Unit	
3a. Address Route #3 Box 3630, Myton UT 84052			8. Lease Name and Well No. Jonah Federal B-15-9-16	
3b. Phone No. (include area code) (435) 646-3721			9. API Well No.	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SE/SE 639' FSL 673' FEL Sec. 10, T9S R16E At proposed prod. zone 45' FNL 1310' FEL Sec. 15, T9S R16E			10. Field and Pool, or Exploratory Monument Butte	
14. Distance in miles and direction from nearest town or post office* Approximately 16.3 miles southwest of Myton, Utah			11. Sec., T., R., M., or Blk. and Survey or Area Sec. 15, T9S R16E	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) Approx. 1310' f/lse, 1365' f/unit		16. No. of Acres in lease 560.00	17. Spacing Unit dedicated to this well 20 Acres	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 1245'		19. Proposed Depth 6100'	20. BLM/BIA Bond No. on file WYB000493	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5698' GL		22. Approximate date work will start* 4th Quarter 2008	23. Estimated duration Approximately seven (7) days from spud to rig release.	

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. I, shall be attached to this form:

- |   |  |
|---|--|
| 1. Well plat certified by a registered surveyor.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan.   | 5. Operator certification.   |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature 	Name (Printed/Typed) Mandie Crozier	Date 6/25/08
Title Regulatory Specialist		
Approved by (Signature)	Name (Printed/Typed)	Date
Title	Office	

Application approval does not warrant or certify the the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

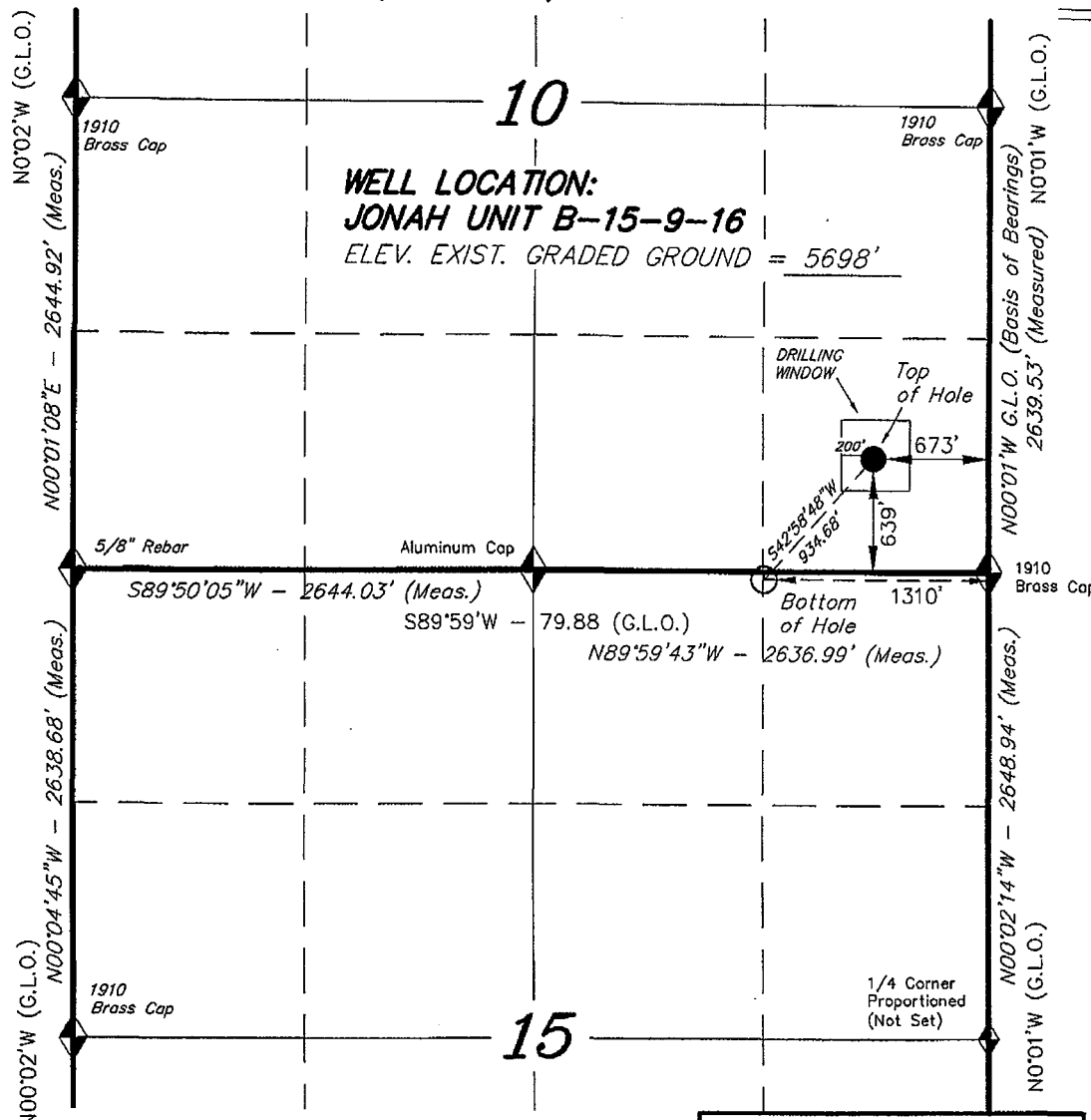
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JUL 02 2008

DIV. OF OIL, GAS & MINING

**T9S, R16E, S.L.B.&M.**

**NEWFIELD PRODUCTION COMPANY**

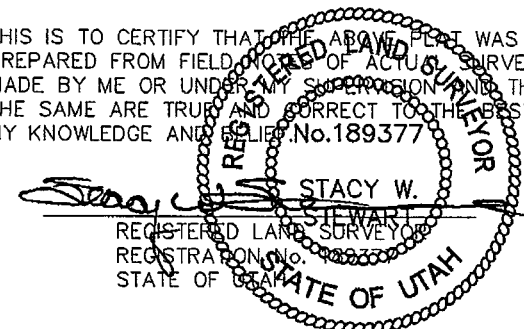


WELL LOCATION, JONAH UNIT B-15-9-16,  
LOCATED AS SHOWN IN THE SE 1/4 SE  
1/4 OF SECTION 10, T9S, R16E, S.L.B.&M.  
DUCHESE COUNTY, UTAH.

**Note:**

- The bottom of hole footages  
are 45' FNL & 1310' FEL.

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS  
PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS  
MADE BY ME OR UNDER MY SUPERVISION AND THAT  
THE SAME ARE TRUE AND CORRECT TO THE BEST OF  
MY KNOWLEDGE AND BELIEF. No. 189377



◆ = SECTION CORNERS LOCATED

BASIS OF ELEV;  
U.S.G.S. 7-1/2 min QUAD (MYTON SE)

**JONAH UNIT B-15-9-16**  
(Surface Location) NAD 83  
LATITUDE = 40° 02' 23.46"  
LONGITUDE = 110° 05' 54.24"

**TRI STATE LAND SURVEYING & CONSULTING**

180 NORTH VERNAL AVE. - VERNAL, UTAH 84078  
(435) 781-2501

DATE SURVEYED: 04-26-08	SURVEYED BY: T.H.
DATE DRAWN: 04-30-08	DRAWN BY: F.T.M.
REVISED:	SCALE: 1" = 1000'

# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:  
3160  
(UT-922)

July 7, 2008

### Memorandum

To: Assistant District Manager Minerals, Vernal District  
From: Michael Coulthard, Petroleum Engineer  
Subject: 2008 Plan of Development Jonah Unit, Duchesne  
County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2008 within the Jonah Unit, Duchesne County, Utah.

API#	WELL NAME	LOCATION
------	-----------	----------

(Proposed PZ Green River)

43-013-34016	Jonah Federal B-15-9-16 Sec 10 T09S R16E 0639 FSL 0673 FEL	
	BHL Sec 15 T09S R16E 0045 FNL 1310 FEL	

We have no objections to permitting the wells so long as the unit operator receives an exception to the locating and siting requirements of the State of Utah (R649-3-2).

/s/ Michael L. Coulthard

bcc: File - Jonah Unit  
Division of Oil Gas and Mining  
Central Files  
Agr. Sec. Chron  
Fluid Chron

MCoulthard:mc:7-7-08



JON M. HUNTSMAN, JR.  
Governor

GARY R. HERBERT  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

July 7, 2008

Newfield Production Company  
Rt. #3, Box 3630  
Myton, UT 84052

Re: Jonah Federal B-15-9-16 Well, Surface Location 639' FSL, 673' FEL, SE SE, Sec. 10, T. 9 South, R. 16 East, Bottom Location 45' FNL, 1310' FEL, NE NE, Sec. 15, T. 9 South, R. 16 East, Duchesne County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-013-34016.

Sincerely,

Gil Hunt  
Associate Director

pab  
Enclosures

cc: Duchesne County Assessor  
Bureau of Land Management, Vernal Office



Operator: Newfield Production Company  
Well Name & Number Jonah Federal B-15-9-16  
API Number: 43-013-34016  
Lease: UTU-017985

Surface Location: SE SE Sec. 10 T. 9 South R. 16 East  
Bottom Location: NE NE Sec. 15 T. 9 South R. 16 East

### Conditions of Approval

#### 1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### 2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

- Contact Carol Daniels at (801) 538-5284

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dustin Doucet at (801) 538-5281 (801) 733-0983 home

#### 3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.

5. In accordance with Utah Admin. R. 649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.



RECEIVED  
VERNAL FIELD OFFICE

2008 JUN 26 PM 12:44

FORM APPROVED  
OMB No. 1004-0136  
Expires January 31, 2004

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

DEPT OF THE INTERIOR  
BUREAU OF LAND MGMT

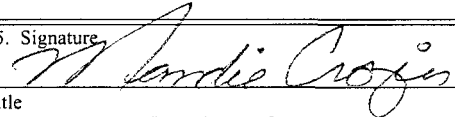
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. UTU-017985
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator Newfield Production Company		7. If Unit or CA Agreement, Name and No. Jonah Unit
3a. Address Route #3 Box 3630, Myton UT 84052		8. Lease Name and Well No. Jonah Federal B-15-9-16
3b. Phone No. (include area code) (435) 646-3721		9. API Well No. 43-013-34016
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SE/SE 639' FSL 673' FEL Sec. 10, T9S R16E At proposed prod. zone <u>WENE</u> 45' FNL 1310' FEL Sec. 15, T9S R16E		10. Field and Pool, or Exploratory Monument Butte
11. Sec., T., R., M., or Blk. and Survey or Area 10 Sec. 15, T9S R16E		12. County or Parish Duchesne
13. State UT		14. Distance in miles and direction from nearest town or post office* Approximatley 16.3 miles southwest of Myton, Utah
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) Approx. 1310' f/ise, 1365' f/unit	16. No. of Acres in lease 560.00	17. Spacing Unit dedicated to this well 20 Acres
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 1245'	19. Proposed Depth 6100'	20. BLM/BIA Bond No. on file WYB000493
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5698' GL	22. Approximate date work will start* 4th Quarter 2008	23. Estimated duration Approximately seven (7) days from spud to rig release.

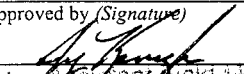
24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- |   |  |
|---|--|
| 1. Well plat certified by a registered surveyor.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan.   | 5. Operator certification.   |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature 	Name (Printed/Typed) Mandie Crozier	Date 6/25/08
---	--	-----------------

Title  
Regulatory Specialist

Approved by (Signature) 	Name (Printed/Typed) Terry Kewels	Date AUG 25 2008
Title Assistant Field Manager Lands & Mineral Resources	Office VERNAL FIELD OFFICE	

Application approval does not warrant or certify the the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
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\*(Instructions on reverse)

RECEIVED

SEP 16 2008

DIV. OF OIL, GAS & MINING

NOS 05-12-2008

AFMSS# 08PFO 8034

U DOB M

NOTICE OF APPROVAL

CONDITIONS OF APPROVAL ATTACHED



UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
VERNAL FIELD OFFICE

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



**CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL**

Company: Newfield Production Company  
Well No: Jonah Federal B-15-9-16  
API No: 43-013-34016

Location: SESE, Sec. 15, T9S, R16E  
Lease No: UTU-017985  
Agreement: Jonah Unit

Title	Name	Office Phone Number	Cell Phone Number
Petroleum Engineer:	Matt Baker	(435) 781-4490	(435) 828-4470
Petroleum Engineer:	Michael Lee	(435) 781-4432	(435) 828-7875
Petroleum Engineer:	James Ashley	(435) 781-4470	(435) 828-7874
Petroleum Engineer:	Ryan Angus	(435) 781-4430	(435) 828-7368
Supervisory Petroleum Technician:	Jamie Sparger	(435) 781-4502	(435) 828-3913
Supervisory NRS:	Karl Wright	(435) 781-4484	(435) 828-7381
NRS/Enviro Scientist:	Holly Villa	(435) 781-4404	(435) 828-3544
NRS/Enviro Scientist:	James Hereford	(435) 781-3412	
NRS/Enviro Scientist:	Chuck Macdonald	(435) 781-4441	(435) 828-7481
NRS/Enviro Scientist:	Dan Emmett	(435) 781-3414	
NRS/Enviro Scientist:	Paul Percival	(435) 781-4493	
NRS/Enviro Scientist:	Michael Cutler	(435) 781-3401	(435) 828-3546
NRS/Enviro Scientist:	Anna Figueroa	(435) 781-3407	(435) 828-3548
NRS/Enviro Scientist:	Verlyn Pindell	(435) 781-3402	(435) 828-3547
NRS/Enviro Scientist:	Darren Williams	(435) 781-4447	(435) 828-4029
NRS/Enviro Scientist:	Nathan Packer	(435) 781-3405	(435) 828-3545

Fax: (435) 781-3420

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR  
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

**NOTIFICATION REQUIREMENTS**

Location Construction (Notify Environmental Scientist)	- Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	- Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	- Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to running casing and cementing all casing strings.
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	- Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

***SURFACE USE PROGRAM  
CONDITIONS OF APPROVAL (COAs)***

- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.

**SITE SPECIFIC CONDITIONS OF APPROVAL**

**Lease Notices from RMP:**

- The lessee/operator is given notice the area has been identified as containing Ferruginous hawk habitat. Modifications may be required in the Surface Use Plan to protect the Ferruginous hawk and/or its habitat from surface disturbance activities in accordance with Section 6 of the lease terms, Endangered Species Act, and 43 CFR 3101.1-2.
- The lessee/operator is given notice the area has been identified as containing Golden eagle habitat. Modifications may be required in the Surface Use Plan to protect the Golden eagle and/or its habitat from surface disturbance activities in accordance with Section 6 of the lease terms, Endangered Species Act, and 43 CFR 3101.1-2.

**Comments:**

None

**Follow-up Actions and/or Recommendations:**

**Please be aware that this Special Status Species wildlife clearance is effective for 1 year from the date of the onsite date. Any proposals submitted after the date of this report (onsite) should require additional surveys and clearances.**

**CONDITIONS OF APPROVAL:**

- All traffic related to this action will be restricted to approved routes. Cross-country vehicle travel will not be allowed.
- All pipelines (surface and buried) will be laid within one 50' wide construction ROW, on one side of the road, and will reduce down to a 30' wide permanent ROW on lease.
- A temporary road ROW will not be granted. The road ROW will be 30 foot for construction and will reduce to an 18 foot running surface.
- The access road will be crowned and ditched. Flat-bladed roads are not allowed. All roads will have an 18', crowned (2 to 3% minimum), running surface. All roads will have drainage ditches along both sides of road.

- No vehicle travel, construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support vehicles and/or construction equipment. If such equipment creates ruts in excess of three inches deep, the soil shall be deemed too wet to adequately support construction equipment.
- If additional erosion occurs during the life of this project, more culverts, low water crossings, berms, wing ditches or etc. will be needed to control the erosion.
- Low-water crossings will be appropriately constructed to avoid sedimentation of drainage ways and other water resources.
- Pipelines will be buried at all major drainage crossings.
- Prevent fill and stock piles from entering drainages.
- To insure impermeability, the reserve pit will be lined with a 16 ml or greater liner and felt prior to spudding.
- The liner is to be cut 5 feet below ground surface or at the level of the cuttings, whichever is deeper, and the excess liner material is to be disposed of at an authorized disposal site.
- When the reserve pit contains fluids or toxic substances, the operator must ensure animals do not ingest or become entrapped in pit fluids.
- Any hydrocarbons in the reserve pit will be removed **immediately** upon well completion; in accordance with 43 CFR 3162.7-1. Pits must be free of oil and other liquid and solid wastes prior to filling.
- Monument Butte SOP, Section 9.2 - Pit Fencing Minimum Standards - will be strictly adhered to. To include 9.2.2.3 - Corner posts will be cemented and/or braced in such a manner as to keep fence tight at all times.
- If Uinta Basin hookless cactus or other special status plants are found, construction will cease and the AO will be notified to determine the appropriate mitigation.

**Within 90 calendar days of the approval date for this Application for Permit to Drill (APD), the operator/lessee shall submit to the Authorized Officer (AO), on Sundry Notice Form 3160-5, an Interim/Final Surface Reclamation Plan for surface disturbance on well pads, access roads, and pipelines. At a minimum, this will include the reshaping of the pad to the original contour to the extent possible; the respreading of the top soil up to the rig anchor points; and, the area reseeded using appropriate reclamation methods. The AO will provide written approval or concurrence within 30 calendar days of receipt.**

**Interim Reclamation:**

- The topsoil from the reserve pit shall be stripped and piled separately near the reserve pit. When the reserve pit is closed, it shall be recontoured and the topsoil respread, and the area shall be **seeded using a rangeland drill**. Seeding depth as per AO, or seed distributor. If portions of the site are too steep (>40%), or rocky, that portion may be broadcast seeded. If broadcasting seed, the seed shall be walked into the soil with a dozer immediately after the seeding is completed, or covered by soil using a drag chain.

- Seeding shall occur in the fall (August 1<sup>st</sup> until snow or ground is frozen) with the following seed mix:

Seed mix:

Common name	Latin name	lbs/acre	Recommended seed planting depth
Squirreltail grass	<i>Elymus elymoides</i>	3.0	¼ - ½"
Siberian wheatgrass	<i>Agropyron fragile</i>	1.0	½"
Shadscale saltbush	<i>Atriplex confertifolia</i>	0.50	½"
Four-wing saltbush	<i>Atriplex canescens</i>	0.50	½"
Gardner's saltbush	<i>Atriplex gardneri</i>	0.50	½"
Scarlet globemallow	<i>Sphaeralcea coccinea</i>	0.10	⅛ - ¼"

- All pounds are pure live seed.
- All seed and mulch will be certified weed free.
- Rates are set for drill seeding; double rate if broadcasting.
- Reseeding may be required if initial seeding is not successful.

#### Final reclamation:

- Once the location is plugged and abandoned, the well location, access, and any disturbed areas shall be recontoured to natural topography, topsoil shall be respread, and the entire location shall be seeded following guidelines in the seed mix bullet statement above. Final seed mix: same as interim.
- Noxious and/or invasive weeds will be controlled along access roads, pipelines, well sites, and all other applicable facilities. Any noxious and/or invasive weeds outbreak, directly attributed to the activities of the Operator, will be the responsibility of the Operator to control. On BLM administered land, a Pesticide Use Proposal (PUP) must be submitted and approved prior to the application of herbicides, pesticides, or other possibly hazardous chemicals.
- The topsoil from the reserve pit shall be stripped and piled separately near the reserve pit. When the reserve pit is closed, it shall be recontoured and the topsoil respread, and the area shall be seeded in the same manner as the location topsoil.
- Once the location is plugged and abandoned, it shall be recontoured to natural topology, topsoil shall be respread, and the entire location shall be seeded with a seed mix recommended by the AO (see above). Seed application will follow all guidelines in the interim seed mix bullet statement above. If reclamation seeding should take place using the broadcast method, the seed at a minimum will be walked into the soil with a dozer immediately after the seeding is completed.
- The authorized officer may prohibit surface disturbing activities during severe winter conditions to minimize watershed damage. This limitation does not apply to operation and maintenance of producing wells.
- The authorized officer may prohibit surface disturbing activities during wet or muddy conditions to minimize watershed damage. This limitation does not apply to operation and maintenance of producing wells.

- All well facilities not regulated by OSHA will be painted Carlsbad Canyon.
- All boulders with a length or diameter greater than 3 feet, that are found showing at the surface, will be stockpiled for use during final reclamation.
- Notify the Authorized Officer 48 hours prior to surface disturbing activities.

**DOWNHOLE PROGRAM  
CONDITIONS OF APPROVAL (COAs)**

**SITE SPECIFIC DOWNHOLE COAs:**

None

**All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to.** The following items are emphasized:

**DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS**

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well in LAS format to UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.



## OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.
  - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or

data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

Spud  
BLM - Vernal Field Office - Notification Form

Operator Newfield Exploration Rig  
Name/# NDSI NS # 1 Submitted By Alvin  
Nielsen Phone Number 435-823-  
7468  
Well Name/Number Jonah Fed B-15-9-  
16  
Qtr/Qtr SE/SE Section 10 Township T9S  
Range R16E  
Lease Serial Number UTU  
017985  
API Number 43-013-  
34016

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time 11/20/08 2:00 AM ☒  
PM ☒

Casing – Please report time casing run starts, not cementing times.

- ☒ Surface Casing
- ☐ Intermediate Casing
- ☐ Production Casing
- ☐ Liner
- ☐ Other

Date/Time 11/21/08 10:00 AM ☒  
PM ☒

BOPE

☐ Initial BOPE test at surface casing point

- ☐ BOPE test at intermediate casing point  
☐ 30 day BOPE test  
☐ Other

Date/Time \_\_\_\_\_ AM ☐ PM ☐

Remarks NDSI NS # 1 spud the Jonah Fed B-15-9-16 on  
11/20/08 @ 2:00 PM & Run casing around 10:00 AM 11/21/08.

\_\_\_\_\_

\_\_\_\_\_

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**SUNDRY NOTICES AND REPORTS ON WELLS**  
Do not use this form for proposals to drill or to re-enter an  
abandoned well. Use Form 3160-3 (APD) for such proposals.

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

**SUBMIT IN TRIPLICATE - Other Instructions on page 2**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

NEWFIELD PRODUCTION COMPANY

3a. Address Route 3 Box 3630

Myton, UT 84052

3b. Phone (include area code)

435.646.3721

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Section <sup>10</sup>45 T9S R16E

5. Lease Serial No.

UTU-017985

6. If Indian, Allottee or Tribe Name.

7. If Unit or CA/Agreement, Name and/or

JONAH UNIT

8. Well Name and No.

JONAH B-15-9-16

9. API Well No.

4301334016

10. Field and Pool, or Exploratory Area

MONUMENT BUTTE

11. County or Parish, State

DUCHESNE, UT

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, OR OTHER DATA**

TYPE OF SUBMISSION

TYPE OF ACTION

☐ Notice of Intent

☒ Subsequent Report

☐ Final Abandonment

☐ Acidize

☐ Alter Casing

☐ Casing Repair

☐ Change Plans

☐ Convert to Injector

☐ Deepen

☐ Fracture Treat

☐ New Construction

☐ Plug & Abandon

☐ Plug Back

☐ Production (Start/Resume)

☐ Reclamation

☐ Recomplete

☐ Temporarily Abandon

☐ Water Disposal

☐ Water Shut-Off

☐ Well Integrity

☒ Other \_\_\_\_\_  
Spud Notice

13. Describe Proposed or Completed Operation: (Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

On 11/20/08 MIRU NDSI NS # 1. Spud well @ 2:00 PM. Drill 320' of 12 1/4" hole with air mist. TIH W/ 7 Jt's 8 5/8" J-55 24 # csgn. Set @ 324.64 KB. On 11/29/08 cement with 160 sks of class "G" w/ 3% CaCL2 + 1/4# sk Cello- Flake Mixed @ 15.8 ppg > 1.17 cf/ sk yeild. Returned 3 bbls cement to pit. WOC.

RECEIVED

DEC 04 2008

DIV. OF OIL, GAS & MINING

I hereby certify that the foregoing is true and correct (Printed/ Typed)

Ryan Crum

Signature

Title

Drilling Foreman

Date

11/29/2008

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title

Date

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious and fraudulent statements or representations as to any matter within its jurisdiction

(Instructions on page 2)

## NEWFIELD PRODUCTION COMPANY - CASING &amp; CEMENT REPORT

**8 5/8" CASING SET AT**

324.2

LAST CASING      8 5/8"      SET AT      324.2

DATUM 12

DATUM TO CUT OFF CASING 12

DATUM TO BRADENHEAD FLANGE 12

## LOGGER

HOLE SIZE 12 1/4"

OPERATOR Newfield Exploration Company

WELL **JONAH B-15-9-16**FIELD/PROSPECT MB

CONTRACTOR & RIG # **NDSI NS # 1**

## LOG OF CASING STRING:

[illegible]

COMPANY REPRESENTATIVE **Ryan Crum** DATE **11/29/2008**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an**  
**abandoned well. Use Form 3160-3 (APD) for such proposals.**

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

**SUBMIT IN TRIPLICATE - Other Instructions on page 2**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

NEWFIELD PRODUCTION COMPANY

3a. Address Route 3 Box 3630

Myton, UT 84052

3b. Phone (include area code)

435.646.3721

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

10  
Section 15 T9S R16E

5. Lease Serial No.

UTU-017985

6. If Indian, Allottee or Tribe Name.

7. If Unit or CA/Agreement, Name and/or

JONAH UNIT

8. Well Name and No.

JONAH B-15-9-16

9. API Well No.

4301334016

10. Field and Pool, or Exploratory Area

MONUMENT BUTTE

11. County or Parish, State

DUCHESNE, UT

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug & Abandon	<input type="checkbox"/> Temporarily Abandon	Weekly Status Report
	<input type="checkbox"/> Convert to Injector	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: (Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

On 12/2/08 MIRU NDSI Rig # 2. Set all equipment. Pressure test Kelly, TIW, Choke manifold, & Bop's to 2,000 psi. Test 8.625 csgn to 1,500 psi. Vernal BLM field, & Roosevelt DOGM office was notified of test. PU BHA and tag cement @ 270'. Drill out cement & shoe. Drill a 7.875 hole with fresh water to a depth of 6,180' & TVD of 6168. Lay down drill string & BHA. Open hole log w/ Dig/SP/GR log's TD to surface. PU & TIH with Guide shoe, shoe jt, float collar, 159 jt's of 5.5 J-55, 15.5# csgn. Set @ 6160.20' / KB. Cement with 280 sks cement mixed @ 11.0 ppg & 3.49 yld. Then 400 sks cement mixed @ 14.4 ppg & 1.24 yld. With 46 bbls cement returned to pit. Nipple down Bop's. Drop slips @65,000 #'s tension. Release rig 1:30 AM 12/8/08.

RECEIVED

DEC 23 2008

DIV. OF OIL, GAS & MINING

I hereby certify that the foregoing is true and correct (Printed/ Typed)

Alvin Nielsen

Signature

Title

Drilling Foreman

Date

12/15/2008

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title

Date

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious and fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)



**NEWFIELD PRODUCTION COMPANY - CASING & CEMENT REPORT**

**5 1/2" CASING SET @ 6160.198**

LAST CASING: 8-5/8" SET @ 324.2  
 DATUM (KB) 12  
 DATUM TO CUT OFF CASING 12  
 DATUM TO BRADENHEAD FLANGE 12  
 DRILLER TD 6180' LOGGER TD 6171'  
 HOLE SIZE 7-7/8" TOP FLOAT COLLAR @ 6119.95  
 TOP SHORT JT @ 3950.87

OPERATOR: Newfield Production Company  
 WELL: Jonah Fed B-15-9-16  
 FIELD/PROSPECT: Monument Butte  
 CONTRACTOR & RIG #: NDSI # 2  
 TVD=6068

Short jt=5.75

**LOG OF CASING STRING:**

PIECES	OD	ITEM - MAKE - DESCRIPTION	WT / FT	GRD	THREAD	CONDT	LENGTH
1		Landing Jt	15.5#	J-55	8rd	A	14
159	5 1/2"	LT&C CASING	15.5#	J-55	8rd	A	6107.95
1	5 1/2"	FLOAT COLLAR	-	-	-	A	0.6
1	5 1/2"	LT&C CASING	15.5#	J-55	8rd	A	39.00
1	5 1/2"	GUIDE SHOE					0.65

CASING INVENTORY BAL.	FEET	JTS
TOTAL LENGTH OF STRING	6162.1975	160
LESS NON CSG. ITEMS	15.25	-
PLUS FULL JTS. LEFT OUT	155.66	4
TOTAL	6302.6075	164
TOTAL CSG. DEL. (W/O THRS)	6302.61	164

TOTAL LENGTH OF STRING

6162.1975

(-) LANDING JT

14

(-) AMOUNT CUTOFF

0

(+) KB ELEVATION

12

CASING SET DEPTH

**6160.20**

COMPARE (SHOULD BE EQUAL)

CEMENT DATA		TIME	DATE
BEGIN RUN CSG.		2:30 PM	12/7/2008
CSG. IN HOLE		6:00 PM	12/7/2008
BEGIN CIRC		6:00 PM	12/7/2008
BEGIN PUMP CMT		7:25 PM	12/7/2008
BEGIN DSPL. CMT		8:30 PM	12/7/2008
PLUG DOWN		8:55 PM	12/7/2008

GOOD CIRC THRU JOB: Yes

Bbls CMT CIRC TO SURFACE: 46

RECIPROCATED PIPE: No

DID BACK PRES. VALVE HOLD ?

BUMPED PLUG TO: 1500 PSI

**RECEIVED**

**DEC 23 2008**

DIV. OF OIL, GAS & MINING

**CEMENT USED**

CEMENT COMPANY:		BJ
STAGE	# SX	CEMENT TYPE & ADDITIVES
1 (lead)	280	Premium Lite II cement + 0.05 lbs/sack Static Free + 3% bwow Potassium Chloride + 0.5 lbs/sack Cello Flake + 2 lbs/sack Kol Seal + 0.002 gps FP-6L + 10% bwoc Bentonite + 0.5% bwoc Sodium Metasilicate + 5 lbs/sack CSE-2 + 204.7% Fresh Water
2 (tail)	400	(50:50) Poz (Fly Ash): Class G Cement + 0.05 lbs/sack Static Free + 3% bwow Potassium Chloride + 0.5% bwoc EC-1 + 0.25 lbs/sack Cello Flake + 0.002 gps FP-6L + 2% bwoc Bentonite + 0.3% bwoc Sodium Metasilicate + 54.7% Fresh Water
CENTRALIZER & SCRATCHER PLACEMENT (SHOW MAKE & SPACING)		
Centralizers - Middle first, top second & third. Then every third collar for a total of 20.		

COMPANY REPRESENTATIVE Alvin Nielsen

DATE 12/7/2008

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-017985
2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: Route 3 Box 3630 CITY Myton STATE UT ZIP 84052		7. UNIT or CA AGREEMENT NAME: JONAH UNIT
4. LOCATION OF WELL: FOOTAGES AT SURFACE:		8. WELL NAME and NUMBER: JONAH FEDERAL B-15-9-16
OTR/OTR SECTION. TOWNSHIP. RANGE. MERIDIAN: 10, 15, T9S, R16E		9. API NUMBER: 4301334016
		10. FIELD AND POOL, OR WILDCAT: MONUMENT BUTTE
		COUNTY: DUCHESNE
		STATE: UT

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLAIR
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of Work Completion:	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
01/30/2009	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/STOP)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: - Weekly Status Report
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The above subject well was completed on 01/07/09, attached is a daily completion status report.

NAME (PLEASE PRINT) Jentri Park

TITLE Production Clerk

SIGNATURE

DATE 01/30/2009

(This space for State use only)

RECEIVED

FEB 02 2009

DIV. OF OIL, GAS & MINING

## Daily Activity Report

Format For Sundry

**JONAH B-15-9-16**

**11/1/2008 To 3/28/2009**

**12/20/2008 Day: 1**

**Completion**

Rigless on 12/19/2008 - Install 5M frac head. NU 6" 5M Cameron BOP. RU H/O truck & pressure test casing, blind rams, frac head & casing valves to 4500 psi. RU Perforators LLC WLT w/ mast & run CBL under pressure. WLTD @ 6090' & cement top @ 100'. Perforate stage #1. CP3 sds @ 5792-98' & CP4 sds @ 5818-28'. All 4 JSPF in 1 run. RD WLT. SIFN W/ est 145 BWTR.

**12/31/2008 Day: 2**

**Completion**

Western #1 on 12/30/2008 - Day 2a, Stage #1 CP3/CP4 sds. RU BJ Services. 853 psi on well. Frac CP3/CP4 sds w/ 50,081#'s of 20/40 sand in 470 bbls of Lightning 17 fluid. Broke @ 2666 psi. Treated w/ ave pressure of 1673 psi w/ ave rate of 22.7 BPM. ISIP 1930 psi. Leave pressure on well. 615 BWTR. See day 2b. Day 2b, Stage #2 CP1 sds. RU The Perforators, llc WLT, crane & Lubricator. RIH w/ Weatherford 5 1/2" 6K composite flow through frac plug & 9' perf gun. Set plug @ 5690'. Perforate CP1 sds @ 5649-58' w/ 3-1/8" Slick Guns (.49"EH, 19 gram, 120°) w/ 4 spf for total of 36 shots. RU BJ Services. 1747 psi on well. Frac CP1 sds w/ 35,468#'s of 20/40 sand in 400 bbls of Lightning 17 fluid. Broke @ 1864 psi. Treated w/ ave pressure of 3004 psi w/ ave rate of 21.3 BPM. ISIP 2128 psi. Leave pressure on well. 1015 BWTR. See day 2c. Day 2c, Stage #3 A1 sds. RU The Perforators, llc WLT, crane & Lubricator. RIH w/ Weatherford 5 1/2" 6K composite flow through frac plug & 2- 5', 8' perf guns. Set plug @ 5300'. Perforate A1 sds @ 5233-38', 5214-22' & 5203-08' w/ 3-1/8" Slick Guns (.49"EH, 19 gram, 120°) w/ 4 spf for total of 72 shots. RU BJ Services. 1066 psi on well. Perfs would not break. Dump bail acid on perfs. RU BJ Services. 1485 psi on well. Frac A1 sds w/ 55,261#'s of 20/40 sand in 530 bbls of Lightning 17 fluid. Broke @ 1797 psi. Treated w/ ave pressure of 1860 psi w/ ave rate of 22.8 BPM. ISIP 2028 psi. Leave pressure on well. 1545 BWTR. See day 2d. Day 2d, Stage #4 B2 sds. RU The Perforators, llc WLT, crane & Lubricator. RIH w/ Weatherford 5 1/2" 6K composite flow through frac plug & 8' perf gun. Set plug @ 5110'. Perforate B2 sds @ 5074-82' w/ 3-1/8" Slick Guns (.49"EH, 19 gram, 120°) w/ 4 spf for total of 32 shots. RU BJ Services. 1690 psi on well. Frac B2 sds w/ 29,377#'s of 20/40 sand in 387 bbls of Lightning 17 fluid. Broke @ 3846 psi. Treated w/ ave pressure of 2379 psi w/ ave rate of 22.9 BPM. ISIP 2143 psi. Leave pressure on well. 1932 BWTR. See day 2e. Day 2e, Stage #5 C sds. RU The Perforators, llc WLT, crane & Lubricator. RIH w/ Weatherford 5 1/2" 6K composite flow through frac plug & 10' perf gun. Set plug @ 4950'. Perforate C sds @ 4914-24' w/ 3-1/8" Slick Guns (.49"EH, 19 gram, 120°) w/ 4 spf for total of 40 shots. RU BJ Services. 1830 psi on well. Frac C sds w/ 29,424#'s of 20/40 sand in 380 bbls of Lightning 17 fluid. Broke @ 3756 psi. Treated w/ ave pressure of 2406 psi w/ ave rate of 22.9 BPM. ISIP 2261 psi. Leave pressure on well. 2312 BWTR. See day 2f. Day 2f, Stage #6 GB4/GB6 sds. RU The Perforators, llc WLT, crane & Lubricator. RIH w/ Weatherford 5 1/2" 6K composite flow through frac plug & 7', 2- 8' perf guns. Set plug @ 4350'. Perforate GB4 sds @ 4191-98' & 4210-18' & GB6 sds @ 4264-72' w/ 3-1/8" Slick Guns (.49"EH, 19 gram, 120°) w/ 4 spf for total of 92 shots. RU BJ Services. 1880 psi on well. Frac GB4/GB6 sds w/ 63,811#'s of 20/40 sand in 497 bbls of Lightning 17 fluid. Broke @ 1889 psi. Treated w/ ave pressure of 1723 psi w/ ave rate of 23.0 BPM. ISIP 1919 psi. Open well to pit for immediate flowback @ approx. 3 bpm. Well flowed for 9 hrs. & died. Recovered 1296 bbls water. SWIFN.

**1/1/2009 Day: 3**

**Completion**

Western #1 on 12/31/2008 - Bleed off well. ND Cameron BOP & 5m frac head. NU 3m production head & Shaffer BOP. RIH w/ 4 3/4" chomp bit, bit sub & new 2 7/8" tbg. from pipe

rack (tallying & drifting) to 4301'. SWIFN.

---

**1/3/2009 Day: 4****Completion**

Western #1 on 1/2/2009 - Bleed off well. Cont. RIH w/ tbg. Tag CBP @ 4350'. RU powerswivel & pump. DU CBP in 10 min. Cont. RIH w/ tbg. Tag CBP @ 4950'. DU CBP in 22 min. Cont. RIH w/ tbg. Cont. RIH w/ tbg. Tag CBP @ 5110'. DU CBP in 17 min. Cont. RIH w/ tbg. Tag CBP @ 5300'. DU CBP in 47 min. Cont. RIH w/ tbg. Tag CBP @ 5690'. DU CBP in 15 min. Cont. RIH w/ tbg. Tag fill @ 5748'. C/O to PBTD @ 6120'. Circulate well clean. Pull up to 6056'. SWIFN.

---

**1/6/2009 Day: 5****Completion**

Western #1 on 1/5/2009 - Bleed off well. Circulate well to kill well. RIH w/ tbg. Tag PBTD @ 6120'. POOH w/ tbg. Stopping once to circulate well. LD BHA. RIH w/ 2 7/8" notched collar, 2 jts 2 7/8" tbg., PSN, 2 jts 2 7/8" tbg., 5 1/2" TAC, 110 jts 2 7/8" tbg. SWIFN.

---

**1/7/2009 Day: 6****Completion**

Western #1 on 1/6/2009 - Bleed off well. Circulate well to kill well. Cont. RIH w/ tbg. ND BOP. Set TAC @ 5760' w/ 16,000# tension. NU wellhead. Flush tbg. w/ 60 bbls water. RIH w/ CDI 2 1/2" x 1 3/4" x 16' x 20' RHAC rod pump, shear coupler, 4- 1 1/2" weight bars, 102- 7/8" guided rods. SWIFN w/ polished rod.

---

**1/8/2009 Day: 7****Completion**

Western #1 on 1/7/2009 - Bleed well off. Flow csg. to production tanks. Cont. RIH w/ rods. Seat pump. RU pumping. Hang off rods. Stroke test to 800 psi. Good pump action. RD. Put well on production @ 10:00 a.m. 5 spm, 122" stroke length. Final Report.

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**Pertinent Files: Go to File List**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB NO. 1004-0137  
Expires: July 31, 2010

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Dry <input type="checkbox"/> Other										5. Lease Serial No. UTU-017985	
b. Type of Completion: <input checked="" type="checkbox"/> New Well <input type="checkbox"/> Work Over <input type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input type="checkbox"/> Diff. Resvr., Other: _____										6. If Indian, Allottee or Tribe Name NA	
2. Name of Operator NEWFIELD EXPLORATION COMPANY										7. Unit or CA Agreement Name and No. WEST POINT	
3. Address 1401 17TH ST. SUITE 1000 DENVER, CO 80202					3a. Phone No. (include area code) (435)646-3721					8. Lease Name and Well No. JONAH FEDERAL B-15-9-16	
4. Location of Well (Report location clearly and in accordance with Federal requirements)*  At surface 639' FSL & 673' FEL (SE/SE) SEC. 15, T9S, R16E  At top prod. interval reported below 45' FNL & 1310' FEL (NE/NE)  At total depth <del>6180</del> <b>0169 FNL 1406 FEL NWNE S-15 T9S R16E</b>										9. AFI Well No. 43-013-34016	
14. Date Spudded 11/20/2008										15. Date T.D. Reached 12/05/2008	
16. Date Completed 01/07/2009 <input type="checkbox"/> D & A <input checked="" type="checkbox"/> Ready to Prod.										17. Elevations (DF, RKB, RT, GL)* 5698' GL 5710' KB	
18. Total Depth: MD 6180' TVD <del>6180</del> <b>6068</b>					19. Plug Back T.D.: MD 6120' TVD <b>6008</b>					20. Depth Bridge Plug Set: MD TVD	
21. Type Electric & Other Mechanical Logs Run (Submit copy of each) <b>DUAL IND GRD, SP, COMP. DENSITY, COMP. NEUTRON, GR, CALIPER, CMT BOND</b>										22. Was well cored? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Was DST run? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit report) Directional Survey? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes (Submit copy)	
23. Casing and Liner Record (Report all strings set in well)											
Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled		
12-1/4"	8-5/8" J-55	24#		324'		160 CLASS G					
7-7/8"	5-1/2" J-55	15.5#		6160'		280 PRIMLITE		100'			
						400 50/50 POZ					
24. Tubing Record											
Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)			
2-7/8"	EOT@ 5887'	TA @5760'									
25. Producing Intervals											
Formation		Top	Bottom	Perforated Interval		Size	No. Holes	Perf. Status			
A) GREEN RIVER				(CP3) & (CP4) see below		.49"	4	64			
B) GREEN RIVER				(CP1) 5649-58'		.49"	4	36			
C) GREEN RIVER				(A1)5233-38,5214-22,5203-		.49"	4	72			
D) Green River				(B2) 5074-5082'		.49"	4	32			
27. Acid, Fracture, Treatment, Cement Squeeze, etc.											
Depth Interval		Amount and Type of Material									
5792-5828'		Frac w/ 50081# of 20/40 snd 470 bbls fluid									
5649-5658'		Frac w/ 35468# 20/40 snd 400 bbls fluid									
5203-5238'		Frac w/ 55261# 20/40 snd 503 bbls fluid									
5074-5082'		Frac w/ 29377# 20/40 snd 387 bbls fluid									
28. Production - Interval A											
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method		
01/07/09	01/26/09	24	→	74	51	42			2-1/2" x 1-3/4" x 16 x 20' RHAC Rod Pump		
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status			
			→					PRODUCING			
28a. Production - Interval B											
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method		
			→								
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status			
			→								

\*(See instructions and spaces for additional data on page 2)

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## 28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

## 28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

## 29. Disposition of Gas (Solid, used for fuel, vented, etc.)

USED FOR FUEL

## 30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

## 31. Formation (Log) Markers

## GEOLOGICAL MARKERS

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
				GARDEN GULCH MRK GARDEN GULCH 1	3712' 3924'
				GARDEN GULCH 2 POINT 3	4036' 4296'
				X MRKR Y MRKR	4568' 4604'
				DOUGALS CREEK MRK BI CARBONATE MRK	4724' 4966'
				B LIMESTON MRK CASTLE PEAK	5090' 5580'
				BASAL CARBONATE TOTAL DEPTH (LOGGERS)	6038' 6171'

## 32. Additional remarks (include plugging procedure):

(CP4) 5818-5828' &amp; (CP3) 5792-5798'

(C) 4914-4924' .49" 4/40 4194-4924' Frac w/ 29242#s of 20/40 sand in 380 bbls of fluid

(GB4) 4191-98', (GB6) 4264-72' .49" 4/92 4191-4272' Frac w/ 63811#s of 20/40 sand in 497 bbls of fluid

## 33. Indicate which items have been attached by placing a check in the appropriate boxes:

- ☐ Electrical/Mechanical Logs (1 full set req'd.)
 ☐ Geologic Report
 ☐ DST Report
 ☒ Directional Survey
- ☐ Sundry Notice for plugging and cement verification
 ☐ Core Analysis
 ☐ Other:

## 34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)\*

Name (please print) Tammi LeeTitle Production ClerkSignature Tammi LeeDate 01/29/2009

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



**Scientific  
Drilling**

## Directional Survey Certification

7327 West Barton Road  
Casper, WY 82604  
(307)-472-6621 Fax (307) 472-5439

Operator	<u>Newfield Exploration Co.</u>
Well Name & No.	<u>Jonah Unit B-15-9-16</u>
County & State	<u>Duchesne County, UT</u>
SDI Job No.	<u>42DEF08121013</u>
Rig	<u>NDSI 2</u>

I, Julie Cruse, having personal knowledge of all the facts, hereby  
certify that the attached directional survey run from a measured depth of 384 feet to a  
measured depth of 6180 feet is true and correct as determined from all available records.

Signature

09-Dec-08

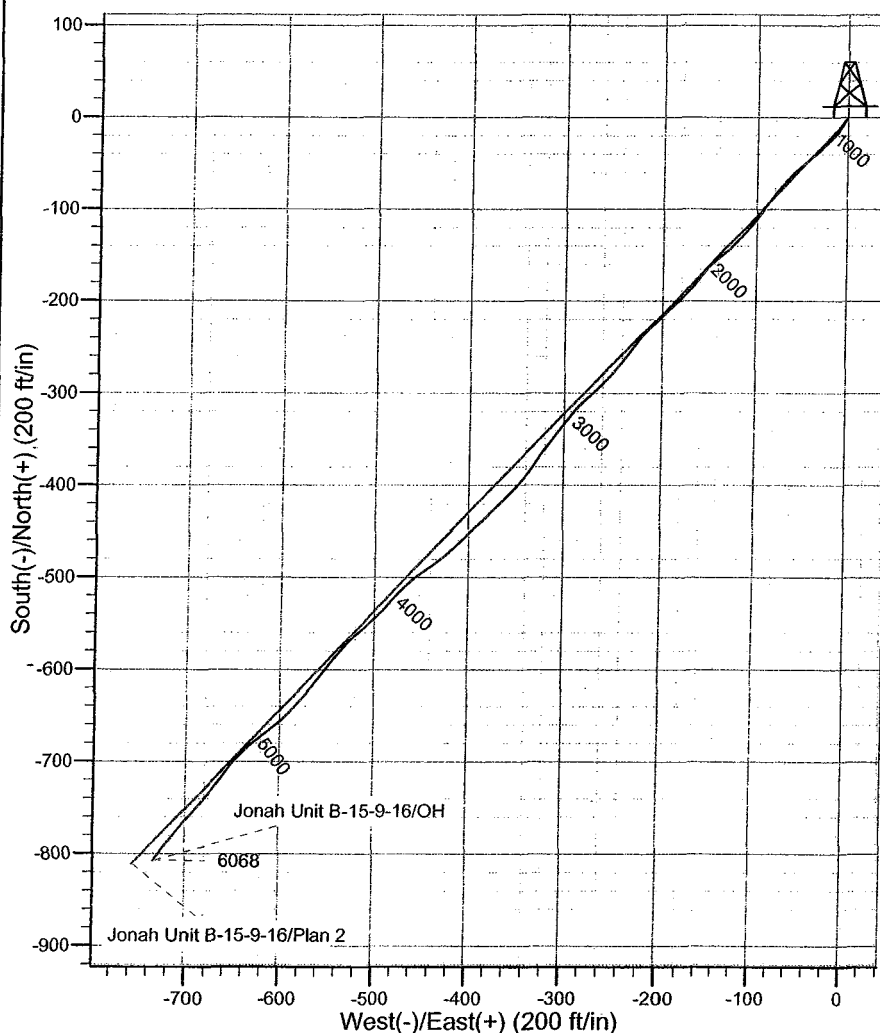
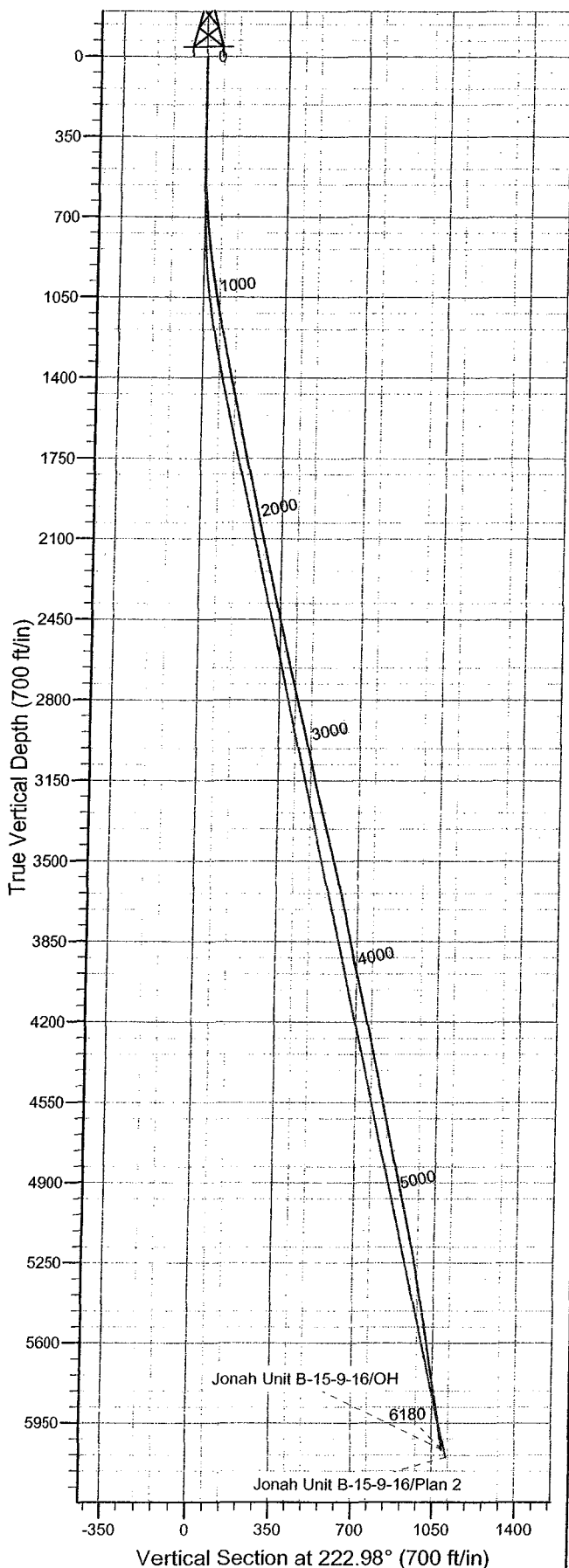
Date

**Julie Cruse**  
Rockies Region Engineer  
Scientific Drilling - Rocky Mountain District



Project: Duchesne County, UT NAD83 UTC  
 Site: Jonah Unit  
 Well: Jonah Unit B-15-9-16  
 Wellbore: OH  
 Design: OH

Newfield Exploration Co.



#### WELL DETAILS: Jonah Unit B-15-9-16

Ground Level: GL 5698' & RKB 12' @ 5710.00ft (NDSI 2)  
 +N/-S +E/-W Northing Easting Latitude Longitude  
 0.00 0.00 7186328.00 2032815.58 40° 2' 23.460 N 110° 5' 54.240 W

#### REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Jonah Unit B-15-9-16, True North  
 Vertical (TVD) Reference: GL 5698' & RKB 12' @ 5710.00ft (NDSI 2)  
 Section (VS) Reference: Slot - (0.00N, 0.00E)  
 Measured Depth Reference: GL 5698' & RKB 12' @ 5710.00ft (NDSI 2)  
 Calculation Method: Minimum Curvature  
 Local North: True  
 Location: Sec 5 T9S R17E

#### PROJECT DETAILS: Duchesne County, UT NAD83 UTC

Geodetic System: US State Plane 1983  
 Datum: North American Datum 1983  
 Ellipsoid: GRS 1980  
 Zone: Utah Central Zone

Design: OH (Jonah Unit B-15-9-16/OH)

Created By: Gregg Detweiler Date: 2008-12-09





## **Newfield Exploration Co.**

Duchesne County, UT NAD83 UTC

Jonah Unit

Jonah Unit B-15-9-16

OH

Design: OH

## **Standard Survey Report**

09 December, 2008



# Scientific Drilling

## Survey Report

**Company:** Newfield Exploration Co.  
**Project:** Duchesne County, UT NAD83 UTC  
**Site:** Jonah Unit  
**Well:** Jonah Unit B-15-9-16  
**Wellbore:** OH  
**Design:** OH

**Local Co-ordinate Reference:** Well Jonah Unit B-15-9-16  
**TVD Reference:** GL 5698' & RKB 12' @ 5710.00ft (NDSI 2)  
**MD Reference:** GL 5698' & RKB 12' @ 5710.00ft (NDSI 2)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.16 Multi User DB

<b>Project</b>	Duchesne County, UT NAD83 UTC		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Utah Central Zone		

<b>Site</b>	Jonah Unit, Sec 5 T9S R17E		
<b>Site Position:</b>		<b>Northing:</b>	7,195,384.71 ft
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,044,880.81 ft
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	in
		<b>Latitude:</b>	40° 3' 51.060 N
		<b>Longitude:</b>	110° 3' 17.240 W
		<b>Grid Convergence:</b>	0.93 °

<b>Well</b>	Jonah Unit B-15-9-16, 639' FSL 673' FEL Sec 10 T9S R16E		
<b>Well Position</b>	+N/-S	0.00 ft	<b>Northing:</b> 7,186,328.00 ft
	+E/-W	0.00 ft	<b>Easting:</b> 2,032,815.58 ft
<b>Position Uncertainty</b>	0.00 ft	<b>Wellhead Elevation:</b>	ft
		<b>Latitude:</b>	40° 2' 23.460 N
		<b>Longitude:</b>	110° 5' 54.240 W
		<b>Ground Level:</b>	5,698.00 ft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2005-10	2008-12-01	11.64	65.86	52,539

<b>Design</b>	OH				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>	
	(ft)	(ft)	(ft)	(°)	
	0.00	0.00	0.00	222.98	

<b>Survey Program</b>	<b>Date</b> 2008-12-09				
<b>From</b>	<b>To</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
(ft)	(ft)				
384.00	6,180.00	Survey #1 (OH)	MWD	MWD - Standard	

<b>Survey</b>									
<b>Measured</b>	<b>Inclination</b>	<b>Azimuth</b>	<b>Vertical</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Vertical</b>	<b>Dogleg</b>	<b>Build</b>	<b>Turn</b>
<b>Depth</b>	<b>(°)</b>	<b>(°)</b>	<b>Depth</b>	<b>(ft)</b>	<b>(ft)</b>	<b>Section</b>	<b>Rate</b>	<b>Rate</b>	<b>Rate</b>
(ft)			(ft)			(ft)	(°/100ft)	(°/100ft)	(°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
384.00	0.13	221.46	384.00	-0.33	-0.29	0.44	0.03	0.03	0.00
<b>First MWD Survey</b>									
415.00	0.20	197.18	415.00	-0.40	-0.33	0.52	0.31	0.23	-78.32
445.00	0.61	211.67	445.00	-0.59	-0.43	0.72	1.40	1.37	48.30
476.00	1.17	206.57	475.99	-1.01	-0.66	1.19	1.82	1.81	-16.45
507.00	1.67	204.74	506.99	-1.71	-0.99	1.92	1.62	1.61	-5.90
537.00	2.13	211.63	536.97	-2.58	-1.46	2.88	1.71	1.53	22.97
568.00	2.46	210.39	567.94	-3.64	-2.10	4.10	1.08	1.06	-4.00
599.00	2.91	211.81	598.91	-4.89	-2.85	5.52	1.47	1.45	4.58
630.00	3.36	214.84	629.86	-6.30	-3.78	7.19	1.55	1.45	9.77
660.00	3.98	216.58	659.80	-7.86	-4.91	9.09	2.10	2.07	5.80
691.00	4.63	215.21	690.71	-9.74	-6.27	11.40	2.12	2.10	-4.42



# Scientific Drilling

## Survey Report

**Company:** Newfield Exploration Co.  
**Project:** Duchesne County, UT NAD83 UTC  
**Site:** Jonah Unit  
**Well:** Jonah Unit B-15-9-16  
**Wellbore:** OH  
**Design:** OH

**Local Co-ordinate Reference:** Well Jonah Unit B-15-9-16  
**TVD Reference:** GL 5698' & RKB 12' @ 5710.00ft (NDSI 2)  
**MD Reference:** GL 5698' & RKB 12' @ 5710.00ft (NDSI 2)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.16 Multi User DB

### Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
722.00	5.29	217.57	721.60	-11.90	-7.86	14.07	2.23	2.13	7.61
752.00	5.80	222.23	751.46	-14.12	-9.72	16.96	2.27	1.70	15.53
783.00	6.18	222.42	782.29	-16.51	-11.90	20.19	1.23	1.23	0.61
814.00	6.62	224.90	813.09	-19.01	-14.29	23.65	1.68	1.42	8.00
844.00	7.02	225.37	842.88	-21.52	-16.82	27.21	1.35	1.33	1.57
875.00	7.36	224.14	873.64	-24.28	-19.55	31.09	1.20	1.10	-3.97
906.00	7.84	224.13	904.37	-27.22	-22.40	35.18	1.55	1.55	-0.03
938.00	8.21	224.21	936.05	-30.42	-25.51	39.65	1.16	1.16	0.25
969.00	8.54	225.07	966.72	-33.63	-28.69	44.16	1.14	1.06	2.77
1,001.00	8.75	228.97	998.36	-36.91	-32.21	48.96	1.95	0.66	12.19
1,033.00	9.08	227.60	1,029.97	-40.21	-35.91	53.90	1.23	1.03	-4.28
1,064.00	9.45	228.72	1,060.57	-43.54	-39.63	58.87	1.33	1.19	3.61
1,096.00	9.87	229.59	1,092.11	-47.05	-43.69	64.21	1.39	1.31	2.72
1,128.00	10.16	231.30	1,123.63	-50.59	-47.98	69.72	1.30	0.91	5.34
1,160.00	10.35	229.29	1,155.12	-54.23	-52.36	75.37	1.27	0.59	-6.28
1,191.00	10.62	226.98	1,185.60	-58.00	-56.56	80.99	1.61	0.87	-7.45
1,223.00	10.99	225.44	1,217.03	-62.15	-60.89	86.98	1.47	1.16	-4.81
1,255.00	11.51	223.14	1,248.42	-66.62	-65.25	93.22	2.15	1.62	-7.19
1,286.00	11.51	221.04	1,278.79	-71.21	-69.39	99.40	1.35	0.00	-6.77
1,318.00	11.73	219.25	1,310.14	-76.14	-73.55	105.84	1.32	0.69	-5.59
1,350.00	11.89	217.48	1,341.46	-81.27	-77.61	112.37	1.24	0.50	-5.53
1,382.00	11.93	216.73	1,372.77	-86.54	-81.59	118.94	0.50	0.12	-2.34
1,413.00	11.77	217.26	1,403.11	-91.62	-85.42	125.27	0.62	-0.52	1.71
1,445.00	11.75	216.27	1,434.44	-96.85	-89.33	131.75	0.63	-0.06	-3.09
1,477.00	11.65	217.16	1,465.77	-102.05	-93.21	138.20	0.64	-0.31	2.78
1,508.00	11.78	217.60	1,496.13	-107.05	-97.03	144.46	0.51	0.42	1.42
1,540.00	12.15	218.00	1,527.43	-112.29	-101.09	151.07	1.18	1.16	1.25
1,572.00	12.52	220.54	1,558.69	-117.58	-105.42	157.89	2.05	1.16	7.94
1,604.00	12.42	221.55	1,589.94	-122.79	-109.96	164.80	0.75	-0.31	3.16
1,635.00	12.03	219.80	1,620.24	-127.77	-114.24	171.36	1.74	-1.26	-5.65
1,667.00	11.42	218.80	1,651.57	-132.80	-118.36	177.85	2.01	-1.91	-3.12
1,699.00	11.11	220.83	1,682.95	-137.60	-122.36	184.09	1.57	-0.97	6.34
1,730.00	11.22	224.04	1,713.37	-142.03	-126.41	190.09	2.04	0.35	10.35
1,762.00	11.20	229.76	1,744.76	-146.28	-130.94	196.28	3.47	-0.06	17.87
1,794.00	11.57	231.96	1,776.13	-150.26	-135.84	202.54	1.78	1.16	6.87
1,826.00	11.86	230.21	1,807.46	-154.34	-140.90	208.97	1.43	0.91	-5.47
1,857.00	12.16	226.54	1,837.78	-158.63	-145.72	215.39	2.65	0.97	-11.84
1,889.00	11.97	221.83	1,869.08	-163.42	-150.38	222.07	3.13	-0.59	-14.72
1,921.00	11.45	219.88	1,900.41	-168.33	-154.63	228.56	2.04	-1.62	-6.09
1,952.00	11.27	218.45	1,930.80	-173.06	-158.48	234.65	1.08	-0.58	-4.61
1,984.00	11.95	220.52	1,962.15	-178.03	-162.58	241.08	2.49	2.12	6.47
2,016.00	12.35	219.57	1,993.43	-183.19	-166.91	247.81	1.40	1.25	-2.97
2,048.00	12.83	221.19	2,024.66	-188.50	-171.43	254.78	1.86	1.50	5.06
2,079.00	12.86	223.59	2,054.89	-193.59	-176.08	261.66	1.72	0.10	7.74
2,111.00	13.13	226.13	2,086.07	-198.68	-181.15	268.86	1.97	0.84	7.94
2,143.00	13.77	227.60	2,117.19	-203.77	-186.58	276.28	2.27	2.00	4.59
2,174.00	13.74	227.34	2,147.30	-208.75	-192.02	283.63	0.22	-0.10	-0.84
2,206.00	12.65	225.52	2,178.45	-213.78	-197.31	290.92	3.64	-3.41	-5.69
2,238.00	11.90	223.28	2,209.72	-218.64	-202.07	297.72	2.78	-2.34	-7.00
2,270.00	11.59	222.09	2,241.05	-223.43	-206.49	304.23	1.23	-0.97	-3.72
2,301.00	11.72	222.34	2,271.41	-228.07	-210.70	310.49	0.45	0.42	0.81
2,333.00	12.42	221.32	2,302.71	-233.05	-215.16	317.18	2.29	2.19	-3.19
2,365.00	12.73	220.06	2,333.94	-238.34	-219.70	324.14	1.29	0.97	-3.94
2,396.00	12.61	216.72	2,364.18	-243.66	-223.92	330.92	2.39	-0.39	-10.77



**Scientific Drilling**  
Rocky Mountain Operations

## Scientific Drilling

### Survey Report

**Company:** Newfield Exploration Co.  
**Project:** Duchesne County, UT NAD83 UTC  
**Site:** Jonah Unit  
**Well:** Jonah Unit B-15-9-16  
**Wellbore:** OH  
**Design:** OH

**Local Co-ordinate Reference:** Well Jonah Unit B-15-9-16  
**TVD Reference:** GL 5698' & RKB 12' @ 5710.00ft (NDSI 2)  
**MD Reference:** GL 5698' & RKB 12' @ 5710.00ft (NDSI 2)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.16 Multi User DB

#### Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
2,428.00	11.95	214.61	2,395.45	-249.19	-227.89	337.67	2.49	-2.06	-6.59
2,460.00	11.51	213.33	2,426.78	-254.58	-231.53	344.09	1.60	-1.37	-4.00
2,492.00	12.09	216.59	2,458.11	-259.94	-235.28	350.57	2.76	1.81	10.19
2,523.00	12.70	217.87	2,488.39	-265.24	-239.31	357.19	2.16	1.97	4.13
2,555.00	13.03	219.05	2,519.58	-270.82	-243.74	364.30	1.32	1.03	3.69
2,587.00	12.83	219.75	2,550.77	-276.35	-248.28	371.44	0.79	-0.62	2.19
2,618.00	12.83	220.83	2,581.00	-281.60	-252.73	378.32	0.77	0.00	3.48
2,650.00	13.13	222.51	2,612.18	-286.97	-257.51	385.50	1.51	0.94	5.25
2,682.00	13.45	222.97	2,643.32	-292.37	-262.51	392.86	1.05	1.00	1.44
2,714.00	13.56	226.12	2,674.44	-297.69	-267.75	400.33	2.32	0.34	9.84
2,745.00	13.45	227.53	2,704.58	-302.65	-273.03	407.55	1.12	-0.35	4.55
2,777.00	13.20	227.06	2,735.72	-307.65	-278.45	414.90	0.85	-0.78	-1.47
2,809.00	13.63	222.53	2,766.85	-312.92	-283.67	422.32	3.55	1.34	-14.16
2,840.00	13.97	219.24	2,796.95	-318.51	-288.51	429.70	2.76	1.10	-10.61
2,872.00	13.86	217.12	2,828.01	-324.56	-293.26	437.37	1.63	-0.34	-6.62
2,904.00	13.46	217.06	2,859.11	-330.58	-297.82	444.89	1.25	-1.25	-0.19
2,935.00	13.26	216.17	2,889.27	-336.33	-302.09	452.01	0.93	-0.65	-2.87
2,967.00	12.56	215.15	2,920.46	-342.14	-306.26	459.10	2.30	-2.19	-3.19
2,999.00	12.80	217.11	2,951.68	-347.81	-310.40	466.07	1.54	0.75	6.12
3,030.00	13.71	218.16	2,981.85	-353.44	-314.74	473.15	3.04	2.94	3.39
3,062.00	13.49	217.28	3,012.96	-359.39	-319.35	480.64	0.94	-0.69	-2.75
3,093.00	12.65	214.28	3,043.15	-365.07	-323.45	487.59	3.48	-2.71	-9.68
3,125.00	11.53	211.90	3,074.44	-370.68	-327.11	494.20	3.83	-3.50	-7.44
3,157.00	11.64	211.37	3,105.79	-376.15	-330.48	500.50	0.48	0.34	-1.66
3,189.00	12.52	213.61	3,137.08	-381.80	-334.09	507.08	3.12	2.75	7.00
3,221.00	13.27	216.57	3,168.28	-387.64	-338.19	514.15	3.12	2.34	9.25
3,252.00	13.84	219.22	3,198.41	-393.37	-342.66	521.39	2.72	1.84	8.55
3,284.00	13.87	220.10	3,229.48	-399.27	-347.55	529.04	0.67	0.09	2.75
3,316.00	13.94	222.01	3,260.54	-405.07	-352.60	536.72	1.45	0.22	5.97
3,348.00	14.19	226.00	3,291.59	-410.65	-358.00	544.49	3.13	0.78	12.47
3,379.00	14.09	225.25	3,321.65	-415.95	-363.41	552.06	0.67	-0.32	-2.42
3,411.00	13.88	225.10	3,352.70	-421.40	-368.90	559.79	0.67	-0.66	-0.47
3,443.00	13.86	222.95	3,383.76	-426.92	-374.23	567.46	1.61	-0.06	-6.72
3,475.00	13.41	222.72	3,414.86	-432.45	-379.36	575.00	1.42	-1.41	-0.72
3,506.00	13.47	224.56	3,445.01	-437.66	-384.33	582.20	1.39	0.19	5.94
3,538.00	13.96	227.59	3,476.10	-442.92	-389.79	589.78	2.72	1.53	9.47
3,570.00	13.90	228.13	3,507.16	-448.09	-395.51	597.45	0.45	-0.19	1.69
3,602.00	13.38	226.13	3,538.26	-453.22	-401.04	604.98	2.19	-1.62	-6.25
3,633.00	12.95	222.99	3,568.44	-458.25	-405.99	612.03	2.69	-1.39	-10.13
3,665.00	12.78	223.79	3,599.64	-463.42	-410.89	619.16	0.77	-0.53	2.50
3,697.00	12.50	225.72	3,630.87	-468.40	-415.82	626.15	1.58	-0.87	6.03
3,728.00	12.09	229.75	3,661.15	-472.84	-420.69	632.73	3.07	-1.32	13.00
3,760.00	11.72	230.84	3,692.47	-477.06	-425.77	639.28	1.35	-1.16	3.41
3,792.00	11.20	229.69	3,723.83	-481.12	-430.66	645.58	1.77	-1.62	-3.59
3,824.00	11.32	232.82	3,755.21	-485.03	-435.53	651.76	1.95	0.37	9.78
3,855.00	12.03	233.35	3,785.57	-488.79	-440.55	657.94	2.32	2.29	1.71
3,887.00	12.21	233.95	3,816.86	-492.78	-445.96	664.54	0.69	0.56	1.87
3,919.00	11.67	234.40	3,848.17	-496.65	-451.33	671.04	1.71	-1.69	1.41
3,950.00	11.27	230.96	3,878.55	-500.38	-456.23	677.11	2.56	-1.29	-11.10
3,982.00	11.62	228.57	3,909.91	-504.49	-461.08	683.41	1.84	1.09	-7.47
4,014.00	12.82	226.37	3,941.19	-509.07	-466.06	690.17	4.02	3.75	-6.87
4,046.00	13.54	223.98	3,972.34	-514.21	-471.23	697.46	2.82	2.25	-7.47
4,077.00	13.57	222.16	4,002.48	-519.52	-476.19	704.72	1.38	0.10	-5.87
4,109.00	13.09	222.46	4,033.62	-524.98	-481.16	712.10	1.52	-1.50	0.94



# Scientific Drilling

## Survey Report

**Company:** Newfield Exploration Co.  
**Project:** Duchesne County, UT NAD83 UTC  
**Site:** Jonah Unit  
**Well:** Jonah Unit B-15-9-16  
**Wellbore:** OH  
**Design:** OH

**Local Co-ordinate Reference:** Well Jonah Unit B-15-9-16  
**TVD Reference:** GL 5698' & RKB 12' @ 5710.00ft (NDS1 2)  
**MD Reference:** GL 5698' & RKB 12' @ 5710.00ft (NDS1 2)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.16 Multi User DB

### Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,141.00	12.90	221.73	4,064.80	-530.32	-485.98	719.29	0.78	-0.59	-2.28
4,172.00	12.60	220.95	4,095.03	-535.45	-490.50	726.13	1.12	-0.97	-2.52
4,204.00	12.07	224.12	4,126.29	-540.49	-495.12	732.96	2.69	-1.66	9.91
4,236.00	12.38	226.94	4,157.57	-545.23	-499.96	739.73	2.10	0.97	8.81
4,268.00	12.56	228.91	4,188.81	-549.86	-505.09	746.61	1.44	0.56	6.16
4,299.00	12.66	230.19	4,219.07	-554.25	-510.24	753.34	0.96	0.32	4.13
4,331.00	12.14	229.49	4,250.32	-558.68	-515.49	760.16	1.69	-1.62	-2.19
4,361.00	11.34	228.39	4,279.69	-562.69	-520.09	766.23	2.77	-2.67	-3.67
4,394.00	11.05	224.12	4,312.06	-567.12	-524.72	772.62	2.66	-0.88	-12.94
4,426.00	11.70	220.95	4,343.44	-571.77	-528.98	778.93	2.82	2.03	-9.91
4,458.00	12.37	220.97	4,374.73	-576.81	-533.35	785.60	2.09	2.09	0.06
4,489.00	12.63	219.39	4,405.00	-581.93	-537.68	792.30	1.39	0.84	-5.10
4,521.00	12.13	219.46	4,436.25	-587.23	-542.04	799.15	1.56	-1.56	0.22
4,553.00	11.11	218.38	4,467.60	-592.25	-546.09	805.58	3.26	-3.19	-3.37
4,585.00	11.38	218.65	4,498.98	-597.13	-549.98	811.80	0.86	0.84	0.84
4,616.00	12.02	217.87	4,529.34	-602.07	-553.87	818.06	2.13	2.06	-2.52
4,648.00	11.69	217.54	4,560.66	-607.27	-557.89	824.61	1.05	-1.03	-1.03
4,680.00	11.23	215.50	4,592.02	-612.37	-561.67	830.92	1.92	-1.44	-6.37
4,711.00	11.10	215.87	4,622.43	-617.25	-565.17	836.88	0.48	-0.42	1.19
4,743.00	11.50	219.21	4,653.81	-622.22	-569.00	843.12	2.40	1.25	10.44
4,775.00	12.04	222.43	4,685.14	-627.15	-573.26	849.64	2.66	1.69	10.06
4,807.00	11.62	222.80	4,716.46	-631.98	-577.71	856.20	1.33	-1.31	1.16
4,839.00	11.00	221.39	4,747.84	-636.64	-581.91	862.47	2.12	-1.94	-4.41
4,870.00	10.43	219.14	4,778.30	-641.03	-585.64	868.23	2.28	-1.84	-7.26
4,902.00	10.75	221.14	4,809.75	-645.53	-589.43	874.10	1.52	1.00	6.25
4,934.00	11.56	223.27	4,841.15	-650.11	-593.59	880.29	2.84	2.53	6.66
4,965.00	11.79	227.25	4,871.51	-654.52	-598.05	886.56	2.70	0.74	12.84
4,997.00	11.78	229.69	4,902.83	-658.85	-602.94	893.06	1.56	-0.03	7.62
5,029.00	11.73	230.31	4,934.16	-663.04	-607.93	899.53	0.42	-0.16	1.94
5,061.00	12.04	231.85	4,965.48	-667.18	-613.06	906.05	1.39	0.97	4.81
5,092.00	12.71	232.65	4,995.75	-671.25	-618.32	912.61	2.23	2.16	2.58
5,124.00	12.47	231.79	5,026.99	-675.52	-623.83	919.50	0.95	-0.75	-2.69
5,156.00	12.22	229.60	5,058.25	-679.85	-629.12	926.27	1.66	-0.78	-6.84
5,187.00	12.37	226.05	5,088.54	-684.28	-634.01	932.85	2.49	0.48	-11.45
5,219.00	12.75	223.21	5,119.77	-689.24	-638.90	939.80	2.27	1.19	-8.87
5,251.00	12.36	223.36	5,151.00	-694.30	-643.67	946.76	1.22	-1.22	0.47
5,282.00	11.53	221.50	5,181.33	-699.03	-648.00	953.17	2.95	-2.68	-6.00
5,314.00	10.76	218.20	5,212.73	-703.78	-651.96	959.35	3.12	-2.41	-10.31
5,346.00	10.47	216.09	5,244.18	-708.47	-655.52	965.21	1.52	-0.91	-6.59
5,378.00	9.68	214.54	5,275.69	-713.04	-658.76	970.76	2.61	-2.47	-4.84
5,395.68	9.97	215.91	5,293.11	-715.50	-660.50	973.75	2.13	1.67	7.75
<b>JU B-15-9-16 Target</b>									
5,409.00	10.20	216.89	5,306.22	-717.38	-661.89	976.07	2.13	1.69	7.36
5,441.00	10.00	217.62	5,337.73	-721.85	-665.28	981.65	0.74	-0.62	2.28
5,473.00	9.12	218.58	5,369.28	-726.03	-668.56	986.94	2.79	-2.75	3.00
5,504.00	7.93	219.54	5,399.94	-729.60	-671.45	991.53	3.87	-3.84	3.10
5,536.00	7.95	219.37	5,431.63	-733.01	-674.26	995.94	0.10	0.06	-0.53
5,568.00	8.63	217.89	5,463.30	-736.62	-677.14	1,000.54	2.23	2.12	-4.62
5,600.00	9.28	218.22	5,494.91	-740.54	-680.21	1,005.50	2.04	2.03	1.03
5,631.00	9.35	219.09	5,525.50	-744.46	-683.35	1,010.51	0.51	0.23	2.81
5,662.00	8.87	219.89	5,556.11	-748.25	-686.47	1,015.41	1.60	-1.55	2.58
5,694.00	8.29	218.95	5,587.75	-751.93	-689.50	1,020.17	1.86	-1.81	-2.94
5,726.00	8.61	220.15	5,619.40	-755.56	-692.49	1,024.86	1.14	1.00	3.75
5,758.00	9.20	220.61	5,651.02	-759.33	-695.70	1,029.81	1.86	1.84	1.44
5,789.00	9.57	220.18	5,681.60	-763.18	-698.98	1,034.86	1.21	1.19	-1.39

## Scientific Drilling

### Survey Report

**Company:** Newfield Exploration Co.  
**Project:** Duchesne County, UT NAD83 UTC  
**Site:** Jonah Unit  
**Well:** Jonah Unit B-15-9-16  
**Wellbore:** OH  
**Design:** OH

**Local Co-ordinate Reference:** Well Jonah Unit B-15-9-16  
**TVD Reference:** GL 5698' & RKB 12' @ 5710.00ft (NDSI 2)  
**MD Reference:** GL 5698' & RKB 12' @ 5710.00ft (NDSI 2)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.16 Multi User DB

#### Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,821.00	9.42	219.72	5,713.16	-767.23	-702.37	1,040.13	0.53	-0.47	-1.44
5,863.00	8.83	218.20	5,754.63	-772.41	-706.56	1,046.78	1.52	-1.40	-3.62
5,895.00	8.47	218.00	5,786.27	-776.19	-709.53	1,051.57	1.13	-1.12	-0.62
5,926.00	8.71	216.43	5,816.92	-779.88	-712.33	1,056.18	1.08	0.77	-5.06
5,958.00	8.91	216.27	5,848.54	-783.83	-715.23	1,061.05	0.63	0.62	-0.50
5,990.00	8.81	217.59	5,880.16	-787.77	-718.19	1,065.95	0.71	-0.31	4.12
6,022.00	8.58	219.13	5,911.79	-791.56	-721.20	1,070.77	1.02	-0.72	4.81
6,117.00	6.87	215.95	6,005.93	-801.66	-729.00	1,083.48	1.85	-1.80	-3.35
6,180.00	6.87	215.95	6,068.48	-807.76	-733.43	1,090.96	0.00	0.00	0.00

Projection to TD

#### Targets

##### Target Name

- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- Shape									
JU B-15-9-16 PBHL	0.00	0.00	6,100.00	-683.80	-637.21	7,185,634.30	2,032,189.17	40° 2' 16.702 N	110° 6' 2.433 W
- actual wellpath misses target center by 160.05ft at 6180.00ft MD (6068.48 TVD, -807.76 N, -733.43 E)									
- Circle (radius 75.00)									
JU B-15-9-16 Target	0.00	0.00	5,300.00	-683.80	-637.21	7,185,634.30	2,032,189.17	40° 2' 16.702 N	110° 6' 2.433 W
- actual wellpath misses target center by 39.94ft at 5395.68ft MD (5293.11 TVD, -715.50 N, -660.50 E)									
- Circle (radius 75.00)									

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_